

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Meridian Automotive Systems, Inc.
14123 Roth Road
Grabill, Indiana 46741-0189**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 003-5942-00059	
Issued by: Original signed by Paul Dubenetzky Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: March 26, 2002 Expiration Date: March 26, 2007

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.4 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary high-pressure fiberglass-reinforced plastics manufacturing and painting source.

Responsible Official:	Jim Gregory
Source Address:	14123 Roth Road, Grabill, Indiana 46741
Mailing Address:	14123 Roth Road, Grabill, Indiana 46741
General Source Phone Number:	219-627-3612
SIC Code:	3089
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Minor Source under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Painting Operations

- (a) One (1) prime spray booth, known as SB-A, equipped with HVLP spray applicators and dry filters for overspray control, installed in September 1993, exhausted through stack G, capacity: 5 gallons of paint per hour.
- (b) One (1) spray booth, known as SB-B, equipped with air atomization spray guns and dry filters for overspray control, installed in June 1973, exhausted through stacks I, J, and K, capacity: 10 gallons of paint per hour.
- (c) One (1) spray booth, known as SB-C24, equipped with electrostatic spray guns and dry filters for overspray control, installed in 1982, exhausted through stacks D and E, capacity: 3 gallons of paint per hour.
- (d) One (1) spray booth, known as SB-C32, equipped with electrostatic spray guns and dry filters for overspray control, installed in 1982, exhausted through stacks B and C, capacity: 4 gallons of paint per hour.
- (e) One (1) prime touch up, known as TU-A, equipped with air atomization spray guns and dry filters for overspray control, installed prior to 1980, exhausted through stack H, maximum capacity: 0.25 gallons of paint per hour.
- (f) One (1) prime touch up, known as TU-B, equipped with air atomization spray guns and dry filters for overspray control, installed prior to 1980, exhausted through stack L, maximum capacity: 0.25 gallons of paint per hour.

- (g) One (1) touch up, known as TU-FNSH, equipped with air atomization spray guns and dry filters for overspray control, installed prior to 1980, exhausted through stack P, capacity: 1 gallon of paint per hour.

Compounding and Reinforced Molding Operations

- (h) Two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, installed in 1986, consisting of:
 - (1) sixteen (16) resin storage tanks, with storage capacities between 2,000 and 6,300 gallons, each,
 - (2) one (1) mixing station,
 - (3) one (1) SMC machine,
 - (4) one (1) compounding area,
 - (5) one (1) SMC holding area, and
 - (6) one (1) material handling and mixing area, equipped with a baghouse for particulate control, capacity: 6200 pounds of fiberglass reinforced plastic parts per hour, total
- (i) One (1) Hannifan 200 ton reinforced plastic molding press, known as PR-0206, installed in 1975, capacity: 141 pounds of fiberglass reinforced plastic parts per hour.
- (j) One (1) Hannifan 200 ton reinforced plastic molding press, known as PR-0213, installed in 1976, capacity: 141 pounds of fiberglass reinforced plastic parts per hour.
- (k) One (1) Erie 400 ton reinforced plastic molding press, known as PR-0419, installed in 1969 and rebuilt in 1986, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (l) One (1) Erie 400 ton reinforced plastic molding press, known as PR-0420, installed in 1969 and rebuilt in 1986, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (m) One (1) Drake 600 ton reinforced plastic molding press, known as PR-0617, installed in 1968, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (n) One (1) Erie 600 ton reinforced plastic molding press, known as PR-0618, installed in 1968 and rebuilt in 1986, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (o) One (1) W-W-M 1200 ton vacuum assisted reinforced plastic molding press, known as PRV-1222, installed in 1973, capacity: 338 pounds of fiberglass reinforced plastic parts per hour.
- (p) One (1) W-W-M 1200 ton vacuum assisted reinforced plastic molding press, known as PRV-1223, installed in 1973, capacity: 338 pounds of fiberglass reinforced plastic parts per hour.
- (q) One (1) W-W-M 1200 ton reinforced plastic molding press, known as PRV-1250, installed in 1978 and rebuilt in 1985, capacity: 338 pounds of fiberglass reinforced plastic parts per hour.

- (r) One (1) Erie 1500 ton vacuum assisted reinforced plastic molding press, known as PRV-1558, installed in 1977, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (s) One (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2024, installed in 1975, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (t) One (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2025, installed in 1975, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (u) One (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2059, installed in 1984, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (v) One (1) 2500 ton reinforced plastic molding press, known as PR-2566, installed in 2000, capacity: 435 pounds of fiberglass reinforced plastic parts per hour. This press was previously known as PRV-2572.
- (w) One (1) 2500 ton reinforced plastic molding press, known as PR-2567, installed in 2000, capacity: 435 pounds of fiberglass reinforced plastic parts per hour. This press was previously known as PRV-2573.
- (x) One (1) W-W-M 4400 ton vacuum assisted reinforced plastic molding press, known as PRV-4470, installed in 1995, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (y) One (1) boiler, known as BLR-B, firing natural gas as primary fuel and propane or diesel fuel as backup, installed in 1974, rated at 8.4 million British thermal units per hour.
- (z) One (1) boiler, known as BLR-A, firing natural gas as primary fuel and propane or diesel fuel as backup, installed in 2000, exhausted through stack M, rated at: 16.7 million British thermal units per hour.
- (aa) One (1) French 600 ton vacuum assisted reinforced plastic molding press, known as PRV-0648, installed in 1978 and rebuilt in 1990, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (bb) One (1) French 800 ton vacuum assisted reinforced plastic molding press, known as PR-0849, installed in 1978 and rebuilt in 1990, capacity: 188 pounds of fiberglass reinforced plastic parts per hour.
- (cc) One (1) EEMCO 1,000 ton vacuum assisted reinforced plastic molding press, known as PRV-1026, installed in 1977 and rebuilt in 1990, capacity: 275 pounds of fiberglass reinforced plastic parts per hour.
- (dd) One (1) HPM Corporation Injection Molding Press, known as PR-1571, installed in 1998, capacity: 188 pounds of fiberglass reinforced plastic parts per hour.
- (ee) One (1) fiberglass reinforced composites touch up spray booth, known as TU-SPLASH, equipped with air atomization spray guns and dry filters for overspray control, exhausted through stack R, maximum capacity: 0.336 gallons of paint per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, rated at a total of 69.9 million British thermal units per hour, including:

One (1) hook oven, known as BO-PH, installed in 1991, exhausted to stack Q, rated at 0.4 million British thermal units per hour, capacity: 10 pounds of waste per hour. (326 IAC 4-2-2)
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. (326 IAC 6-3-2)
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. (326 IAC 6-3-2)
- (d) Paved and unpaved roads and parking lots with public access. (326 IAC 6-4)
- (e) Activities with emissions equal to or less than the following thresholds: Lead (Pb): 0.6 tons per year or 3.29 pounds per day, SO₂: five (5) pounds per hour or twenty-five (25) pounds per day, NO_x: five (5) pounds per hour or twenty-five (25) pounds per day, CO: twenty-five (25) pounds per day, PM: five (5) pounds per hour or twenty-five (25) pounds per day, and VOC: three (3) pounds per hour or fifteen (15) pounds per day:

Drilling, Trimming, Sanding of Fiberglass Reinforced Plastic Parts (326 IAC 6-3-2)
- (f) Two (2) buffing table booths with filters and stacks located in the C-shop. (326 IAC 6-3-2)
- (g) One (1) maintenance paint booth, used for touch up of equipment, identified as GRB-PB-SMC1, capacity: 5 gallons of paint per month, equivalent to VOC emissions of 222 pounds per year. (326 IAC 6-3-2)

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967
 - (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

- (1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20 (b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;

- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10.1 (a), (c), (d) and (e), emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

(a) A compliance schedule for meeting the requirements of 40 CFR 68; or

(b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68,

including the registration and submission of a Risk Management Plan (RMP);

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5]
[326 IAC 2-7-6]

-
- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
- (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
- (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Painting and Compounding Operations

- (a) One (1) prime spray booth, known as SB-A, equipped with HVLP spray applicators and dry filters for overspray control, installed in September 1993, exhausted through stack G, capacity: 5 gallons of paint per hour.
- (b) One (1) spray booth, known as SB-B, equipped with air atomization spray guns and dry filters for overspray control, installed in June 1973, exhausted through stacks I , J, and K, capacity: 10 gallons of paint per hour.
- (c) One (1) spray booth, known as SB-C24, equipped with electrostatic spray guns and dry filters for overspray control, installed in 1982, exhausted through stacks D and E, capacity: 3 gallons of paint per hour.
- (d) One (1) spray booth, known as SB-C32, equipped with electrostatic spray guns and dry filters for overspray control, installed in 1982, exhausted through stacks B and C, capacity: 4 gallons of paint per hour.
- (e) One (1) prime touch up, known as TU-A, equipped with air atomization spray guns and dry filters for overspray control, installed prior to 1980, exhausted through stack H, maximum capacity: 0.25 gallons of paint per hour.
- (f) One (1) prime touch up, known as TU-B, equipped with air atomization spray guns and dry filters for overspray control, installed prior to 1980, exhausted through stack L, maximum capacity: 0.25 gallons of paint per hour.
- (g) One (1) touch up, known as TU-FNSH, equipped with air atomization spray guns and dry filters for overspray control, installed prior to 1980, exhausted through stack P, capacity: 1 gallon of paint per hour.
- (h) Two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, installed in 1986, consisting of:
 - (1) sixteen (16) resin storage tanks, with storage capacities between 2,000 and 6,300 gallons, each,
 - (2) one (1) mixing station,
 - (3) one (1) SMC machine,
 - (4) one (1) compounding area,
 - (5) one (1) SMC holding area, and
 - (6) one (1) material handling and mixing area, equipped with a baghouse for particulate control, capacity: 6200 pounds of fiberglass reinforced plastic parts per hour, total

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds [326 IAC 8-1-6]

- (a) Pursuant to CP 003-3105-00059, issued on September 7, 1993, Best Available Control Technology (BACT) for the one (1) prime spray booth, identified as SB-A, has been determined to be:
 - (1) The method of application shall be performed with high-volume-low pressure (HVLP) spray applicators;
 - (2) The use of lower VOC paints (less than 3.5 lb VOC per gallon of coating excluding water).
- (b) Pursuant to 326 IAC 8-1-6, Best Available Control Technology (BACT) for the two (2) spray booths, identified as SB-C24 and SB-C32, has been determined to be:
 - (1) The VOC input delivered to the applicators including cleanup solvents shall be limited to a total of no more than sixty-six (66) tons per twelve (12) consecutive month period;
 - (2) The method of application at the spray booths shall be done with electrostatic applicators;
 - (3) The use of low (25-40%) and medium (41-50%) solids content coatings, and
 - (4) The following management and work practices shall apply:
 - (i) Operator training course.
 - (ii) Spray gun cleaning.
 - (iii) The cleanup solvent containers used to transport solvent from drums to work stations be closed containers having soft gasketed closures.
 - (iv) The application equipment operators shall be instructed and trained on the methods and practices utilized to minimize spillage on the floor and over application.
 - (v) Storage containers used to store VOC and/or HAPs containing materials shall be kept covered when not in use.
 - (vi) Cleanup solvents will be reused in the process as much as possible to reduce hazardous waste and the related impact on the environment. D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The VOC applied to the applicators from the four (4) spray booths (SB-A, SB-B, SB-C24 and SB-C32), the four (4) touch-up booths (TU-A, TU-B, TU-FNSH and TU-SPLASH), the two (2) polyester products raw materials compounding lines (SMC-MFG1 and SMC-MFG3), the eighteen (18) Reinforced Plastic Molding Presses, installed between 1968 and 1998 (PR-0206, PR-0213, PR-0419, PR-0420, PR-0617, PR-0618, PRV-0648, PRV-0849, PRV-1026, PRV-1222, PRV-1223, PR-1250, PRV-1558, PRV-2024, PRV-2025, PRV-2059, PRV-4470, PR-1571), and the two (2) 2500 ton Reinforced Plastic Molding Presses, constructed in 2000 (PR-2566 and PR-2567) shall be limited such that the total VOC

emissions are no more than 246.1 tons per twelve (12) consecutive month period.

The SMC closed molding operations performed by the eighteen (18) Reinforced Plastic Molding Presses shall use the standard US EPA AP-42 three percent (3.0%) VOC emission factor to determine compliance with the VOC emission limit.

- (b) The VOC emission limit expressed in Condition D.1.2 (a) combined with the full potential to emit VOC from the two (2) boilers and the limited actual emissions not to exceed 3.23 tons per year from other insignificant activities shall limit the total source-wide VOC emissions to less than two hundred and fifty (250) tons per twelve (12) consecutive month period. Compliance with this limit makes the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 40 CFR 52.21 not applicable.

D.1.3 Volatile Organic Compounds [326 IAC 8-1-6]

The input of VOC to the two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, installed in 1986, is limited such that VOC emissions shall be less than twenty-five (25) tons per year, each, to make the requirements of 326 IAC 8-1-6 not applicable.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) The PM from each spray booth (the one (1) prime spray booth, known as SB-A, the one (1) spray booth, known as SB-B, the one (1) spray booth, known as SB-C24, the one (1) spray booth, known as SB-C32, the one (1) prime touch up, known as TU-A, the one (1) prime touch up, known as TU-B, and the one (1) touch up, known as TU-FNSH) shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

- (b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable particulate matter (PM) emission rate from two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, shall not exceed 8.75 pounds per hour when operating at a process weight rate of 6,200 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1, D.1.2 and D.1.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer for the painting operations, and the SMC usage and

emission factors for the SMC operations and the polyester products raw materials lines.

D.1.7 VOC Emissions

Compliance with Conditions D.1.1, D.1.2, and D.1.3 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) month period.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.8 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the four (4) spray booths (SB-A, SB-B, SB-C24 and SB-C32) and three (3) touch up booths (TU-A, TU-B and TU-FNSH) are in operation.

D.1.9 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks B, C, D, E, G, H, I, J, K, L, and P while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.2 and D.1.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.1.1, D.1.2 and D.1.3.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and

- (5) The weight of VOCS emitted for each compliance period.
- (b) To document compliance with Condition D.1.9 the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1, D.1.2 and D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Reinforced Molding Operations

- (i) One (1) Hannifan 200 ton reinforced plastic molding press, known as PR-0206, installed in 1975, capacity: 141 pounds of fiberglass reinforced plastic parts per hour.
- (j) One (1) Hannifan 200 ton reinforced plastic molding press, known as PR-0213, installed in 1976, capacity: 141 pounds of fiberglass reinforced plastic parts per hour.
- (k) One (1) Erie 400 ton reinforced plastic molding press, known as PR-0419, installed in 1969 and rebuilt in 1986, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (l) One (1) Erie 400 ton reinforced plastic molding press, known as PR-0420, installed in 1969 and rebuilt in 1986, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (m) One (1) Drake 600 ton reinforced plastic molding press, known as PR-0617, installed in 1968, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (n) One (1) Erie 600 ton reinforced plastic molding press, known as PR-0618, installed in 1968 and rebuilt in 1986, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (o) One (1) W-W-M 1200 ton vacuum assisted reinforced plastic molding press, known as PRV-1222, installed in 1973, capacity: 338 pounds of fiberglass reinforced plastic parts per hour.
- (p) One (1) W-W-M 1200 ton vacuum assisted reinforced plastic molding press, known as PRV-1223, installed in 1973, capacity: 338 pounds of fiberglass reinforced plastic parts per hour.
- (q) One (1) W-W-M 1200 ton reinforced plastic molding press, known as PRV-1250, installed in 1978 and rebuilt in 1985, capacity: 338 pounds of fiberglass reinforced plastic parts per hour.
- (r) One (1) Erie 1500 ton vacuum assisted reinforced plastic molding press, known as PRV-1558, installed in 1977, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (s) One (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2024, installed in 1975, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (t) One (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2025, installed in 1975, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (u) One (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2059, installed in 1984, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (v) One (1) 2500 ton reinforced plastic molding press, known as PR-2566, installed in 2000, capacity: 435 pounds of fiberglass reinforced plastic parts per hour. This press was previously known as PRV-2572.
- (w) One (1) 2500 ton reinforced plastic molding press, known as PR-2567, installed in 2000, capacity: 435 pounds of fiberglass reinforced plastic parts per hour. This press was previously known as PRV-2573.
- (x) One (1) W-W-M 4400 ton vacuum assisted reinforced plastic molding press, known as PRV-4470, installed in 1995, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (aa) One (1) French 600 ton vacuum assisted reinforced plastic molding press, known as PRV-0648, installed in 1978 and rebuilt in 1990, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (bb) One (1) French 800 ton vacuum assisted reinforced plastic molding press, known as PR-0849, installed in 1978 and rebuilt in 1990, capacity: 188 pounds of fiberglass reinforced plastic parts per hour.
- (cc) One (1) EEMCO 1,000 ton vacuum assisted reinforced plastic molding press, known as PRV-1026, installed in 1977 and rebuilt in 1990, capacity: 275 pounds of fiberglass reinforced plastic parts per hour.
- (dd) One (1) HPM Corporation Injection Molding Press, known as PR-1571, installed in 1998, capacity: 188 pounds of fiberglass reinforced plastic parts per hour.
- (ee) One (1) fiberglass reinforced composites touch up spray booth, known as TU-SPLASH, equipped with air atomization spray guns and dry filters for overspray control, exhausted through stack R, maximum capacity: 0.336 gallons of paint per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The VOC delivered to the applicators from the four (4) spray booths (SB-A, SB-B, SB-C24 and SB-C32), the four (4) touch-up booths (TU-A, TU-B, TU-FNSH and TU-SPLASH), the two (2) polyester products raw materials compounding lines (SMC-MFG1 and SMC-MFG3), the eighteen (18) Reinforced Plastic Molding Presses, installed between 1968 and 1998 (PR-0206, PR-0213, PR-0419, PR-0420, PR-0617, PR-0618, PRV-0648, PRV-0849, PRV-1026, PRV-1222, PRV-1223, PR-1250, PRV-1558, PRV-2024, PRV-2025, PRV-2059, PRV-4470, PR-1571), and the two (2) 2500 ton Reinforced Plastic Molding Presses, constructed in 2000 (PR-2566 and PR-2567) shall be limited such that the total VOC emissions are no more than 246.1 tons per twelve (12) consecutive month period.

The SMC closed molding operations performed by the eighteen (18) Reinforced Plastic Molding Presses shall use the standard US EPA AP-42 three percent (3.0%) VOC emission factor to determine compliance with the VOC emission limit.

- (b) This VOC emission limit combined with the full potential to emit VOC from the two (2) boilers and 3.23 tons per year from insignificant activities shall limit the total source-wide VOC emissions to less than two hundred and fifty (250) tons per twelve (12) consecutive month period. Compliance with this limit makes the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 40 CFR 52.21 not applicable.

D.2.2 Hazardous Air Pollutants [326 IAC 2-4.1-1]

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), the use of resins, cleanup solvents, and other material containing hazardous air pollutants (HAPs) from the two (2) 2,500 ton reinforced plastic molding presses, known as PR-2566 and PR-2567, shall be limited such that the potential to emit (PTE) a single HAP shall be less than ten (10) tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-4.1-1 do not apply.

D.2.3 Volatile Organic Compounds [326 IAC 8-1-6]

Any change or modification which would increase the potential to emit VOC to twenty-five (25) tons per year or more from any of the reinforced plastic molding presses (PR-0206, PR-0213, PR-0419, PR-0420, PR-0617, PR-0618, PRV-1222, PRV-1223, PRV-1250, PRV-1558, PRV-2024, PRV-2025, PRV-2059, PR-2566, PR-2567, PRV-4470, PRV-0648, PR-0849, PRV-1026, PR-1571) shall obtain prior approval from IDEM, OAQ.

Compliance Determination Requirements

D.2.4 Volatile Organic Compounds (VOC)

Compliance with the VOC usage limitations contained in Condition D.2.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the manufacturer including the SMC usage and emission factors for the SMC operations.

D.2.5 VOC and HAPs Emissions

Compliance with Conditions D.2.1 and D.2.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the twelve (12) month period.

D.2.6 HAPs Emissions

Compliance with the HAP usage limitation in Condition D.2.2 shall be determined based upon the following criteria:

- (a) Monthly usage by weight, HAP monomer content, method of application, and other emission reduction techniques for each resin shall be recorded.

(b) HAPs emissions from each type of emitting material shall be calculated as follows:

(1) Resins

Multiply the usage of each resin by the HAP monomer content of each resin and by the emission factor for closed molding taken from US EPA's AP-42 document. Any volatile HAP contained in the resin that is not monomer is assumed to be 100% emitted.

(2) All Other Materials

Any volatile HAP contained in the other materials is assumed to be 100% emitted.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no specific Compliance Monitoring Requirements applicable to these emission units.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.7 Record Keeping Requirements

(a) To document compliance with Condition D.2.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.1.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The cleanup solvent usage for each month;

(4) The total VOC usage for each month; and

(5) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP emission limits established in Condition D.2.2.

(1) The amount and HAP content of each resin and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the months of use;

(3) The cleanup solvent usage for each month;

(4) The total HAP usage for each month; and

- (5) The weight of HAPs emitted for each compliance period.
- (c) To document compliance with Condition D.2.3, the Permittee shall maintain records of the throughput of fiberglass through each reinforced plastic molding presses and the percent resin content of the fiberglass.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.2.1 and D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Two (2) natural gas fired boilers

- (y) One (1) boiler, known as BLR-B, firing natural gas as primary fuel and propane or diesel fuel as backup, installed in 1974, rated at 8.4 million British thermal units per hour.
- (z) One (1) boiler, known as BLR-A, firing natural gas as primary fuel and propane or diesel fuel as backup, installed in 2000, exhausted through stack M, rated at: 16.7 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]**D.3.1 Particulate Matter (PM) [326 IAC 6-2-3]**

Pursuant to 326 IAC 6-2-3(e), the allowable PM emission rate from the one (1) boiler, identified as BLR-B, shall not exceed 0.6 pounds per million British thermal units heat input.

D.3.2 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983), the allowable PM emission rate from the one (1) boiler, known as BLR-A, shall not exceed 0.472 pounds per million British thermal units heat input when operating at 16.7 million British thermal units per hour.

D.3.3 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 12-1] [40 CFR 60.40c]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) and 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

- (a) The SO₂ emissions from the sixteen and seven tenths (16.7) MMBtu per hour oil-fueled boiler shall not exceed five tenths (0.5) pounds per million Btu heat input; or
- (b) The sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. [40 CFR 60.42c(d)]

Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.

D.3.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the one (1) boiler known as BLR-A..

Compliance Determination Requirements**D.3.5 Sulfur Dioxide Emissions and Sulfur Content**

Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:

- (a) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
- (b) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

- (1) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
- (2) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.6 Visible Emissions Notations

- (a) Visible emission notations of the two (2) boilers, known as BLR-A and BLR-B stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere when burning diesel fuel. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.7 Record Keeping Requirements

- (a) To document compliance with Conditions D.3.3 and D.3.5, the Permittee shall maintain records in accordance with (1) through (6) below. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times including periods of startup, shutdown, and malfunction.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and

- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.3.6, the Permittee shall maintain records of visible emission notations of the boiler stack exhausts once per shift when burning diesel fuel.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.8 Reporting Requirements

- (a) A certification, signed by the responsible official, that certifies all of the fuels combusted during the period. The natural gas-fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34);
- (b) The natural gas boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported.
- (c) A semi-annual summary of the information to document compliance with Condition 3.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, rated at a total of 69.9 million British thermal units per hour, including:

One (1) hook oven, known as BO-PH, installed in 1991, exhausted to stack Q, rated at 0.4 million British thermal units per hour, capacity: 10 pounds of waste per hour. (326 IAC 4-2-2)
- (b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment. (326 IAC 6-3-2)
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. (326 IAC 6-3-2)
- (d) Paved and unpaved roads and parking lots with public access. (326 IAC 6-4)
- (e) Activities with emissions equal to or less than the following thresholds: Lead (Pb): 0.6 tons per year or 3.29 pounds per day, SO₂: five (5) pounds per hour or twenty-five (25) pounds per day, NO_x : five (5) pounds per hour or twenty-five (25) pounds per day, CO: twenty-five (25) pounds per day, PM: five (5) pounds per hour or twenty-five (25) pounds per day, and VOC: three (3) pounds per hour or fifteen (15) pounds per day:

Drilling, Trimming, Sanding of Fiberglass Reinforced Plastic Parts (326 IAC 6-3-2)
- (f) Two (2) buffing table booths with filters and stacks located in the C-shop. (326 IAC 6-3-2)
- (g) One (1) maintenance paint booth, used for touch up of equipment, identified as GRB-PB-SMC1, capacity: 5 gallons of paint per month, equivalent to VOC emissions of 222 pounds per year. (326 IAC 6-3-2)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Incinerators [326 IAC 4-2-2]

Pursuant to 326 IAC 4-2-2, the one (1) hook oven, known as BO-PH, which serves as an incinerator, shall:

- (a) Consist of primary and secondary chambers or the equivalent;
- (b) Be equipped with a primary burner unless burning wood products;
- (c) Comply with 326 IAC 5-1 (Opacity limitations) and 326 IAC 2 (Permit Review Rules);
- (d) Be maintained properly as specified by the manufacturer and approved by IDEM;
- (e) Be operated according to the manufacturer's recommendation and only burn waste approved by IDEM;

- (f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
- (g) Be operated so that emissions of hazardous materials including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented;
- (h) Not create a nuisance or a fire hazard; and
- (i) Not emit particulate matter (PM) in excess of 0.3 pounds per 1000 pounds of dry exhaust gas corrected to fifty percent (50%) excess air.

The operation of the incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements.

D.4.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the brazing, cutting, soldering, welding and trimming, drilling, sanding, buffing, and maintenance painting operations shall not exceed the allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

D.4.3 Volatile Organic Compounds [326 IAC 8-2-9]

Any change or modification which would increase the actual VOC emissions to fifteen (15) pounds per day or more from the one (1) maintenance paint booth, when coating metal, shall obtain prior approval from IDEM, OAQ.

Compliance Determination Requirements

There are no specific Compliance Determination Requirements applicable to these insignificant activities.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

There are no specific Compliance Monitoring Requirements applicable to these insignificant activities.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.4 Record Keeping Requirements

- (a) To document compliance with Condition D.4.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.4.3.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (2) A log of the dates of use;
- (3) The total VOC usage for each day; and
- (4) The weight of VOCs emitted for each compliance period.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Meridian Automotive Systems
Source Address: 14123 Roth Road, Grabill, Indiana 46741
Mailing Address: 14123 Roth Road, Grabill, Indiana 46741
Part 70 Permit No.: T 003-5942-00059

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Meridian Automotive Systems
Source Address: 14123 Roth Road, Grabill, Indiana 46741
Mailing Address: 14123 Roth Road, Grabill, Indiana 46741
Part 70 Permit No.: T 003-5942-00059

This form consists of 2 pages

Page 1 of 2

- 9** This is an emergency as defined in 326 IAC 2-7-1(12)
- ☐ The Permittee must notify the Office of Air Quality (OAQ), within four **(4)** business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - ☐ The Permittee must submit notice in writing or by facsimile within two **(2)** days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS-FIRED BOILER CERTIFICATION**

Source Name: Meridian Automotive Systems
Source Address: 14123 Roth Road, Grabill, Indiana 46741
Mailing Address: 14123 Roth Road, Grabill, Indiana 46741
Part 70 Permit No.: T 003-5942-00059

9	Natural Gas Only	
9	Alternate Fuel burned	
	From: _____	To: _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Meridian Automotive Systems
Source Address: 14123 Roth Road, Grabill, Indiana 46741
Mailing Address: 14123 Roth Road, Grabill, Indiana 46741
Part 70 Permit No.: T 003-5942-00059
Facilities: Two (2) spray booths, known as SB-C24 and SB-C32
Parameter: Total VOC delivered to the applicators
Limit: Sixty-six (66) tons per twelve (12) consecutive month period

YEAR: _____

Month	VOC (tons)	VOC (tons)	VOC (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Meridian Automotive Systems
Source Address: 14123 Roth Road, Grabill, Indiana 46741
Mailing Address: 14123 Roth Road, Grabill, Indiana 46741
Part 70 Permit No.: T 003-5942-00059
Facilities: Two (2) polyester products raw materials compounding lines, SMC-MFG1 and SMC-MFG3.
Parameter: VOC delivered to the applicators
Limit: Less than twenty-five (25) tons per twelve (12) consecutive month period, each.

YEAR: _____

Month	VOC (tons)	VOC (tons)	VOC (tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Meridian Automotive Systems
Source Address: 14123 Roth Road, Grabill, Indiana 46741
Mailing Address: 14123 Roth Road, Grabill, Indiana 46741
Part 70 Permit No.: T 003-5942-00059
Facilities: Two (2) 2500 ton plastic molding presses, known as PR-2566 and PR-2567
Parameter: Individual HAP
Limit: Less than ten (10) tons per twelve (12) consecutive month period, each.

YEAR: _____

Month	Individual HAP (Tons)	Individual HAP (Tons)	Individual HAP (Tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Meridian Automotive Systems
Source Address: 14123 Roth Road, Grabill, Indiana 46741
Mailing Address: 14123 Roth Road, Grabill, Indiana 46741
Part 70 Permit No.: T 003-5942-00059
Facilities: Four (4) spray booths (SB-A, SB-B, SB-C24 and SB-C32), four (4) touch-up booths (TU-A, TU-B, TU-FNSH, and TU-SPLASH), two (2) polyester products raw materials compounding lines (SMC-MFG1 and SMC-MFG3), eighteen (18) Reinforced Plastic Molding Presses, installed between 1968 and 1998 (PR-0206, PR-0213, PR-0419, PR-0420, PR-0617, PR-0618, PRV-0648, PRV-0849, PRV-1026, PRV-1222, PRV -1223, PR-1250, PRV-1558, PRV-2024, PRV-2025, PRV-2059, PRV-4470, PR-1571), and the two (2) 2500 ton Reinforced Plastic Molding Presses, constructed in 2000 (PR-2566 and PR-2567)
Parameter: VOC emissions
Limit: Less than 246.1 tons per twelve (12) consecutive month period, total.

YEAR: _____

Month	VOC (Tons)	VOC (Tons)	VOC (Tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Meridian Automotive Systems
Source Address: 14123 Roth Road, Grabill, Indiana 46741
Mailing Address: 14123 Roth Road, Grabill, Indiana 46741
Part 70 Permit No.: T 003-5942-00059

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Meridian Automotive Systems, Inc.
Source Location: 14123 Roth Road, Grabill, Indiana 46741-0189
County: Allen
SIC Code: 3089
Operation Permit No.: T 003-5942-00059
Permit Reviewer: Craig J. Friederich

On November 30, 2001, the Office of Air Quality (OAQ) had a notice published in the Fort Wayne Journal Gazette, Fort Wayne, Indiana, stating that Meridian Automotive Systems, Inc. had applied for a Part 70 Operating Permit to operate a high-pressure fiberglass-reinforced plastics manufacturing and painting source. The notice also stated that OAQ proposed to issue a Part 70 Operating Permit for this operation and provided information on how the public could review the proposed Part 70 Operating Permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Operating Permit should be issued as proposed.

On December 28, 2001, Jim Gregory of Meridian Automotive Systems, submitted comments on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Page 31, Item D.1.2(b) - The annual VOC emission limit from "insignificant activities" was reduced from 3.43 in the preliminary draft permit to 3.23 tons per year. We do not find any apparent reason and bring it to your attention as a possible typographical error. Please convert this back to its initial value.

Response 1:

As per comments received from Meridian Automotive Systems, Inc. dated October 22, 2001, it was indicated that the one (1) boiler, identified as BLR-B, was not removed from service as previously indicated by the source and thus must be added to the equipment list. The potential to emit VOC from this boiler is 0.20 tons per year. Therefore, in order to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 40 CFR 52.21 not applicable, and to allow for full potential to emit from the two (2) boilers, the allowable VOC emissions from insignificant activities has been reduced by 0.20 tons from 3.43 to 3.23. Therefore, Condition D.1.2(b) has been revised in the proposed permit to indicate that the actual emissions from all other insignificant activities shall not exceed 3.23 tons per year as follows:

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The VOC applied to the applicators from the four (4) spray booths (SB-A, SB-B, SB-C24 and SB-C32), the three (3) touch-up booths (TU-A, TU-B and TU-FNSH), the two (2) polyester products raw materials compounding lines (SMC-MFG1 and SMC-MFG3), the eighteen (18) Reinforced Plastic Molding Presses, installed between 1968 and 1998 (PR-0206, PR-0213, PR-0419, PR-0420, PR-0617, PR-0618, PRV-0648, PRV-0849, PRV-1026, PRV-1222, PRV-1223, PR-1250, PRV-1558, PRV-2024, PRV-2025, PRV-2059, PRV-4470, PR-1571), and the two (2) 2500 ton Reinforced Plastic Molding Presses, constructed in 2000 (PR-2566 and PR-2567) shall be limited such that the total VOC emissions are no more than 246.1 tons per twelve (12) consecutive month period.

The SMC closed molding operations performed by the eighteen (18) Reinforced Plastic Molding Presses shall use the standard US EPA AP-42 three percent (3.0%) VOC emission factor to determine compliance with the VOC emission limit.

- (b) The VOC emission limit expressed in Condition D.1.2 (a) combined with the full potential to emit VOC from the two (2) boilers and **the limited actual emissions not to exceed 3.23 tons per year from other** insignificant activities shall limit the total source-wide VOC emissions to less than two hundred and fifty (250) tons per twelve (12) consecutive month period. Compliance with this limit makes the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 40 CFR 52.21 not applicable.

Comment 2:

Page 38, Facility Description Box. The box heading should be corrected to describe "two (2) natural gas-fired boilers."

Response 2:

The facility description box heading for Section D.3 on page 38 (now page 37) has been corrected as follows:

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: ~~One (1)~~ Two (2) natural gas fired boilers

- (y) One (1) boiler, known as BLR-B, firing natural gas as primary fuel and propane or diesel fuel as backup, installed in 1974, rated at 8.4 million British thermal units per hour.
- (z) One (1) boiler, known as BLR-A, firing natural gas as primary fuel and propane or diesel fuel as backup, installed in 2000, exhausted through stack M, rated at: 16.7 million British thermal units per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Comment 3:

The addition of the small paint booth will be used for touch up of equipment and small racks and should be added to the permit as an insignificant activity. The paint used will be a Sherwin Williams industrial equipment paint with a VOC content on 3.71 pounds per gallon with the projected maximum quantity of 5 gallons per month, which would be approximately 222 pounds per year at most. The booth has been assigned an equipment number of GRB-PB-SMC1. The booth is 124 inches wide by 25 inches deep by 98 inches tall with a exhaust fan with capacity of 4,400 cubic feet per minute. This booth will be used for equipment maintenance only and not for any production processes.

Response 3:

This small paint booth has VOC emissions of less than fifteen (15) pounds per day qualifies as an insignificant activity because the VOC emission levels are less than ten (10) tons per year pursuant to 326 IAC 2-1.1-3. The VOC emissions, with a VOC content of 3.71 pounds per gallon and a maximum usage of five (5) gallons per month are no more than 0.11 tons per year. This will not affect

the estimate of emissions from insignificant activities and will not have any effect on the limits proposed in this Title V permit. The small paint booth has been added to Section A.3, Section D.4 and Condition D.4.2. In addition, Conditions D.4.3 and D.4.4 have been added in the proposed permit as follows:

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (g) **One (1) maintenance paint booth, used for touch up of equipment, identified as GRB-PB-SMC1, capacity: 5 gallons of paint per month, equivalent to VOC emissions of 222 pounds per year. (326 IAC 6-3-2)**

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

- (g) **One (1) maintenance paint booth, used for touch up of equipment, identified as GRB-PB-SMC1, capacity: 5 gallons of paint per month, equivalent to VOC emissions of 222 pounds per year. (326 IAC 6-3-2)**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.4.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the brazing, cutting, soldering, welding and trimming, drilling, sanding, buffing, **and maintenance painting** operations shall not exceed the allowable PM emission rate based on the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

D.4.3 Volatile Organic Compounds [326 IAC 8-2-9]

Any change or modification which would increase the actual VOC emissions to fifteen (15) pounds per day or more from the one (1) maintenance paint booth, when coating metal, shall obtain prior approval from IDEM, OAQ.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.4 Record Keeping Requirements

- (a) **To document compliance with Condition D.4.3, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.4.3.**

- (1) **The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent**

usage records shall differentiate between those added to coatings and those used as cleanup solvents;

- (2) A log of the dates of use;**
- (3) The total VOC usage for each day; and**
- (4) The weight of VOCs emitted for each compliance period.**

Comment 4:

Dennis Sherfield of Meridian Automotive Systems called on 1/30/02 to indicate that an additional touch up paint booth, used to touch up fiberglass reinforced composites, should have been included in the Title V permit. The following is an e-mail with the information on this booth:

Per our discussion earlier today here is the information on the Touch up paint booth that is located on the shop floor that was not included in the Permit. The booth is numbered TU-SPLASH. The dimensions are 11 foot wide x 8 foot deep x 8 foot with a stack that will be designated as R. The maximum estimated VOC emissions for this booth will be around 4,200 pounds per year.

Response 4: The addition of the touch up booth known as TU-SPLASH results in the following changes:

Change 1: The potential to emit VOC for this booth has been calculated as 7.89 tons per year and the potential to emit PM₁₀ has been calculated at 6.18 tons per year, before controls. Therefore, this booth is to be included in the equipment list as a significant emission source in the TSD, Section A.2, and Section D.2 as follows. In addition, this booth was never permitted and therefore the CWOP/OWOP booth has been added to the Office of Enforcement Referral.

Unpermitted Emission Units and Pollution Control Equipment

- (ee) One (1) fiberglass reinforced composites touch up spray booth, known as TU-SPLASH, equipped with air atomization spray guns and dry filters for overspray control, exhausted through stack R, maximum capacity: 0.336 gallons of paint per hour.**

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Compounding and Reinforced Molding Operations

- (ee) One (1) fiberglass reinforced composites touch up spray booth, known as TU-SPLASH, equipped with air atomization spray guns and dry filters for overspray control, exhausted through stack R, maximum capacity: 0.336 gallons of paint per hour.**

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Reinforced Molding Operations

(ee) One (1) fiberglass reinforced composites touch up spray booth, known as TU-SPLASH, equipped with air atomization spray guns and dry filters for overspray control, exhausted through stack R, maximum capacity: 0.336 gallons of paint per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Change 2: Due to the addition of the one (1) fiberglass reinforced composites touch up spray booth, known as TU-SPLASH, the potential to emit and limited potential to emit tables have been updated as follows:

Pollutant	Potential To Emit (tons/year)
PM	379 385
PM ₁₀	374 377
SO ₂	57.6
VOC	790 798
CO	41.8
NO _x	91.7

	Limited Potential to Emit (tons/year)						
Process/facility (Installation Dates)	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPS
One (1) Prime Spray Booth (SB-A) (1993)	0.525	0.525	0.00	(a)	0.00	0.00	
One (1) Spray Booth (SB-B) (1973)	3.15	3.15	0.00		0.00	0.00	
One (1) Spray Booth (SB-C24) (1982)	0.320	0.320	0.00		0.00	0.00	
One (1) Spray Booth (SB-C32) (1982)	0.426	0.426	0.00		0.00	0.00	

	Limited Potential to Emit (tons/year)						
Process/facility (Installation Dates)	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPS
Three (3) Four (4) Touch Up Booths (TU-A, TU-B, TU- FNSH, TU- SPLASH)	0.710 1.33	0.710 1.33	0.00	(b) Less than 246.1	0.00	0.00	(b) Less than 246.1 (e)
Two (2) polyester products raw materials compounding lines (SMC-MFG1, SMC-MFG3) (1986)	3.04	3.04	0.00		0.00	0.00	
Eighteen (18) Reinforced Plastic Molding Presses, (1968 - 1998)	0.00	0.00	0.00		0.00	0.00	
Two (2) 2500 ton Reinforced Plastic Molding Presses, known as PR-2566 and PR-2567, (2000)	0.00	0.00	0.00		0.00	0.00	(c)
One (1) Boiler, BLR-A, (2000)	1.04	1.04	37.1	0.402	6.14	15.2	0.138
One (1) Boiler, BLR-B, (1974)	0.526	0.526	18.7	0.202	3.09	7.64	0.069
Insignificant Activities	32.5	24.2	1.81	3.23	32.6	68.9	1.60
Total Emissions	42.2 42.9	33.9 34.6	57.6	less than 250 (d)	41.8	91.7	less than 247.9

Change 3: Page 26 has been added to Appendix A of the TSD to account for the potential emissions from this additional booth. The additional page is attached.

Change 4: Conditions D.1.2 and D.2.1 of the permit have been revised as follows to incorporate the new booth into the 246.1 ton per year VOC limit.

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The VOC delivered to the applicators from the four (4) spray booths (SB-A, SB-B, SB-C24 and SB-C32), the ~~three (3)~~ **four (4)** touch-up booths (TU-A, TU-B, TU-FNSH, **and TU-SPLASH**), the two (2) polyester products raw materials compounding lines (SMC-MFG1 and SMC-MFG3), the eighteen (18) Reinforced Plastic Molding Presses, installed between 1968 and 1998 (PR-0206, PR-0213, PR-0419, PR-0420, PR-0617, PR-0618, PRV-0648,

PRV-0849, PRV-1026, PRV-1222, PRV-1223, PR-1250, PRV-1558, PRV-2024, PRV-2025, PRV-2059, PRV-4470, PR-1571), and the two (2) 2500 ton Reinforced Plastic Molding Presses, constructed in 2000 (PR-2566 and PR-2567) shall be limited such that the total VOC emissions are no more than 246.1 tons per twelve (12) consecutive month period.

The SMC closed molding operations performed by the eighteen (18) Reinforced Plastic Molding Presses shall use the standard US EPA AP-42 three percent (3.0%) VOC emission factor to determine compliance with the VOC emission limit.

D.2.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The VOC delivered to the applicators from the four (4) spray booths (SB-A, SB-B, SB-C24 and SB-C32), the ~~three (3)~~ **four (4)** touch-up booths (TU-A, TU-B, TU-FNSH, **and TU-SPLASH**), the two (2) polyester products raw materials compounding lines (SMC-MFG1 and SMC-MFG3), the eighteen (18) Reinforced Plastic Molding Presses, installed between 1968 and 1998 (PR-0206, PR-0213, PR-0419, PR-0420, PR-0617, PR-0618, PRV-0648, PRV-0849, PRV-1026, PRV-1222, PRV-1223, PR-1250, PRV-1558, PRV-2024, PRV-2025, PRV-2059, PRV-4470, PR-1571), and the two (2) 2500 ton Reinforced Plastic Molding Presses, constructed in 2000 (PR-2566 and PR-2567) shall be limited such that the total VOC emissions are no more than 246.1 tons per twelve (12) consecutive month period.

The SMC closed molding operations performed by the eighteen (18) Reinforced Plastic Molding Presses shall use the standard US EPA AP-42 three percent (3.0%) VOC emission factor to determine compliance with the VOC emission limit.

Change 5: The Quarterly report form to show compliance with the 246.1 ton per year limit has been changed as shown on the last page of the document.

Upon further review, the OAQ has decided to make the following changes to the Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

The following updates have been made to incorporate the Article 2 rule revisions that were adopted on October 3, 2001, and became effective on January 19, 2002. For more information about this rulemaking, refer to the October 2001 Air Pollution Control Board Packet which can be found on the Internet at <http://www.state.in.us/idea/air/rules/apcb/packets/index.html>. The rule revisions were published in the February 1, 2002 Indiana Register which can be found on the Internet at <http://www.IN.gov/legislative/register/index-25.html>.

Change 1:

Condition B.2 has had the rule cite 326 IAC 2-1.1-9.5 added to include the new promulgated rule which clarifies when permits expire and when conditions in previous issued permits are superseded as follows:

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

Change 2:

Condition B.12 Emergency Provisions (a), (b) and (g) have been revised to reflect rule changes to 326 IAC 2-7-16. This section of the rule is now consistent with 40 CFR 70.6(g) and provides an

affirmative defense to an action brought for non-compliance with technology-based emission limitations only. The condition is changed as follows:

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, ~~except as provided in 326 IAC 2-7-16.~~
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a ~~health-based or~~ technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
- (g) ~~Operations may continue during an emergency only if the following conditions are met:~~
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) ~~If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:~~
 - (A) ~~The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~
 - (B) ~~Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.~~

~~Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~

Change 3:

Condition B.14 Multiple Exceedances has been deleted because 326 IAC 2-7-5(1)(E) has been repealed since it conflicted with 40 CFR 70.6(a)(6) as follows:

~~B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]~~

~~Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.~~

Change 4:

Condition B.14 Prior Permits Superseded was added to the proposed permit to implement the intent of the new rule 326 IAC 2-1.1-9.5 as follows:

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

Change 5:

Paragraph (b) of Condition B.13 Permit Shield has been deleted because this paragraph is no longer necessary due to the addition of the new Condition B.14 Prior Permits Superseded as follows:

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

~~(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.~~

Change 5. The U.S. EPA has made it clear that there can not be a requirement to do something in a permit, then say that it's not a deviation when the source does not do it [see 40 CFR 70.6(a)(6)(i)]. IDEM may use enforcement discretion in these cases, but can not create an exemption through the FESOP. Therefore, Condition B.15 has been revised accordingly:

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~Deviations that are required to be reported by an applicable requirement~~ **A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit** shall be reported according to the schedule stated in the applicable requirement and ~~do~~ **does** not need to be included in this report.

~~The notification by the Permittee~~ **Quarterly Deviation and Compliance Monitoring Report** does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit ~~or a rule. It does not include:~~

~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~

- (2) ~~Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~

~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

Change 6. IDEM has clarified Condition C.8 so that the Permittee understands that the asbestos notification should be certified by the owner or operator and not the responsible official. IDEM has also revised Condition C.16, to require a certification by the responsible official for the notification sent in response to non-compliance with a stack test:

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition ~~does not~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Change 7:

The OAQ has restructured Condition C.15 to clarify the contents and implementation of the Compliance Response Plan. The language regarding the OAQ's discretion to excuse failure to perform

monitoring under certain conditions has been deleted. The OAQ retains this discretion, and it is not necessary to state criteria regarding the exercise of that discretion in the permit. In paragraph (c)(2) of Condition C.15, now renamed Compliance Response Plan - Preparation, Implementation, Records, and Reports, "administrative amendment" has been revised to "minor permit modification," because 326 IAC 2-7-11(a)(7) has been repealed. Requests that do not involve significant changes to monitoring, reporting, or record keeping requirements may now be approved as minor permit modifications. References to this condition throughout the proposed permit have been revised to reflect the name change of this condition as follows:

C.15 ~~Compliance Response Plan - Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports** [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) ~~The Permittee is required to **prepare** implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:~~

~~(1) This condition;~~

~~(2) The Compliance Determination Requirements in Section D of this permit;~~

~~(3) The Compliance Monitoring Requirements in Section D of this permit;~~

~~(4) The Record Keeping and Reporting Requirements in Section G (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and~~

(5) **A a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, and maintained on site, and is comprised of:**

~~(A)(1)~~ **Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and an expected time frame for taking reasonable response steps.**

~~(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.~~

(2) **If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.**

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition **as follows: Failure to take reasonable response steps may constitute a violation of the permit.**
- (1) **Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or**
 - (2) **If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.**
 - (3) **If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.**
 - (4) **Failure to take reasonable response steps shall constitute a violation of the permit.**
- (c) ~~Upon investigation of a compliance monitoring excursion, the~~ **The** Permittee is ~~excused from taking~~ **not required to take any** further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment **and This shall be an excuse from taking further response steps providing that** prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment **minor permit modification** to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) **When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.**
- (d)(e) ~~Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.~~ **The Permittee shall record all instances when response steps are taken.** In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

- (e)(f) **Except as otherwise provided by a rule or provided specifically in Section D**, all monitoring **as** required in Section D shall be performed **at all times when** the equipment **emission unit** is operating, **except for time necessary to perform quality assurance and maintenance activities**. ~~If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.~~
- (f) ~~At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.~~

In light of this, all references in the permit to "Compliance Monitoring Plan" have been changed to "Compliance Response Plan."

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source Name: Meridian Automotive Systems
Source Address: 14123 Roth Road, Grabill, Indiana 46741
Mailing Address: 14123 Roth Road, Grabill, Indiana 46741
Part 70 Permit No.: T 003-5942-00059
Facilities: Four (4) spray booths (SB-A, SB-B, SB-C24 and SB-C32), ~~three (3)~~ **four (4)** touch-up booths (TU-A, TU-B, TU-FNSH, **and TU-SPLASH**), two (2) polyester products raw materials compounding lines (SMC-MFG1 and SMC-MFG3), eighteen (18) Reinforced Plastic Molding Presses, installed between 1968 and 1998 (PR-0206, PR-0213, PR-0419, PR-0420, PR-0617, PR-0618, PRV-0648, PRV-0849, PRV-1026, PRV-1222, PRV -1223, PR-1250, PRV-1558, PRV-2024, PRV-2025, PRV-2059, PRV-4470, PR-1571), and the two (2) 2500 ton Reinforced Plastic Molding Presses, constructed in 2000 (PR-2566 and PR-2567)
Parameter: VOC emissions
Limit: Less than 246.1 tons per twelve (12) consecutive month period, total.

YEAR: _____

Month	VOC (Tons)	VOC (Tons)	VOC (Tons)
	This Month	Previous 11 Months	12 Month Total

9 No deviation occurred in this month.

9 Deviation/s occurred in this month.

Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Meridian Automotive Systems, Inc.
Source Location: 14123 Roth Road, Grabill, Indiana 46741-0189
County: Allen
SIC Code: 3089
Operation Permit No.: T 003-5942-00059
Permit Reviewer: Craig J. Friederich

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Meridian Automotive Systems, Inc. relating to the operation of high-pressure fiberglass-reinforced plastics manufacturing and painting source.

History

Meridian Automotive Systems, Inc. was previously Cambridge Industries and was permitted as Eagle Picher Plastics Division. Cambridge Industries submitted the Title V application on May 29, 1996.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

Painting Operations

- (a) One (1) prime spray booth, known as SB-A, equipped with HVLP spray applicators and dry filters for overspray control, installed in September 1993, exhausted through stack G, capacity: 5 gallons of paint per hour.
- (b) One (1) spray booth, known as SB-B, equipped with air atomization spray guns and dry filters for overspray control, installed in June 1973, exhausted through stacks I, J, and K, capacity: 10 gallons of paint per hour.
- (c) One (1) spray booth, known as SB-C24, equipped with electrostatic spray guns and dry filters for overspray control, installed in 1982, exhausted through stacks D and E, capacity: 3 gallons of paint per hour.
- (d) One (1) spray booth, known as SB-C32, equipped with electrostatic spray guns and dry filters for overspray control, installed in 1982, exhausted through stacks B and C, capacity: 4 gallons of paint per hour.
- (e) One (1) prime touch up, known as TU-A, equipped with air atomization spray guns and dry filters for overspray control, installed prior to 1980, exhausted through stack H, maximum capacity: 0.25 gallons of paint per hour.

- (f) One (1) prime touch up, known as TU-B, equipped with air atomization spray guns and dry filters for overspray control, installed prior to 1980, exhausted through stack L, maximum capacity: 0.25 gallons of paint per hour.
- (g) One (1) touch up, known as TU-FNSH, equipped with air atomization spray guns and dry filters for overspray control, installed prior to 1980, exhausted through stack P, capacity: 1 gallon of paint per hour.

Compounding and Reinforced Molding Operations

- (h) Two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, installed in 1986, consisting of:
 - (1) sixteen (16) resin storage tanks, with storage capacities between 2,000 and 6,300 gallons, each,
 - (2) one (1) mixing station,
 - (3) one (1) SMC machine,
 - (4) one (1) compounding area,
 - (5) one (1) SMC holding area, and
 - (6) one (1) material handling and mixing area, equipped with a baghouse for particulate control, capacity: 6200 pounds of fiberglass reinforced plastic parts per hour, total
- (i) One (1) Hannifan 200 ton reinforced plastic molding press, known as PR-0206, installed in 1975, capacity: 141 pounds of fiberglass reinforced plastic parts per hour.
- (j) One (1) Hannifan 200 ton reinforced plastic molding press, known as PR-0213, installed in 1976, capacity: 141 pounds of fiberglass reinforced plastic parts per hour.
- (k) One (1) Erie 400 ton reinforced plastic molding press, known as PR-0419, installed in 1969 and rebuilt in 1986, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (l) One (1) Erie 400 ton reinforced plastic molding press, known as PR-0420, installed in 1969 and rebuilt in 1986, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (m) One (1) Drake 600 ton reinforced plastic molding press, known as PR-0617, installed in 1968, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (n) One (1) Erie 600 ton reinforced plastic molding press, known as PR-0618, installed in 1968 and rebuilt in 1986, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (o) One (1) W-W-M 1200 ton vacuum assisted reinforced plastic molding press, known as PRV-1222, installed in 1973, capacity: 338 pounds of fiberglass reinforced plastic parts per hour.
- (p) One (1) W-W-M 1200 ton vacuum assisted reinforced plastic molding press, known as PRV-1223, installed in 1973, capacity: 338 pounds of fiberglass reinforced plastic parts per hour.

- (q) One (1) W-W-M 1200 ton reinforced plastic molding press, known as PRV-1250, installed in 1978 and rebuilt in 1985, capacity: 338 pounds of fiberglass reinforced plastic parts per hour.
- (r) One (1) Erie 1500 ton vacuum assisted reinforced plastic molding press, known as PRV-1558, installed in 1977, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (s) One (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2024, installed in 1975, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (t) One (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2025, installed in 1975, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (u) One (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2059, installed in 1984, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (v) One (1) 2500 ton reinforced plastic molding press, known as PR-2566, installed in 2000, capacity: 435 pounds of fiberglass reinforced plastic parts per hour. This press was previously known as PRV-2572.
- (w) One (1) 2500 ton reinforced plastic molding press, known as PR-2567, installed in 2000, capacity: 435 pounds of fiberglass reinforced plastic parts per hour. This press was previously known as PRV-2573.
- (x) One (1) W-W-M 4400 ton vacuum assisted reinforced plastic molding press, known as PRV-4470, installed in 1995, capacity: 263 pounds of fiberglass reinforced plastic parts per hour.
- (y) One (1) boiler, known as BLR-B, firing natural gas as primary fuel and propane or diesel fuel as backup, installed in 1974, rated at 8.4 million British thermal units per hour.

Unpermitted Emission Units and Pollution Control Equipment

- (z) One (1) boiler, known as BLR-A, firing natural gas as primary fuel and propane or diesel fuel as backup, installed in 2000, exhausted through stack M, rated at: 16.7 million British thermal units per hour.
- (aa) One (1) French 600 ton vacuum assisted reinforced plastic molding press, known as PRV-0648, installed in 1978 and rebuilt in 1990, capacity: 219 pounds of fiberglass reinforced plastic parts per hour.
- (bb) One (1) French 800 ton vacuum assisted reinforced plastic molding press, known as PR-0849, installed in 1978 and rebuilt in 1990, capacity: 188 pounds of fiberglass reinforced plastic parts per hour.
- (cc) One (1) EEMCO 1,000 ton vacuum assisted reinforced plastic molding press, known as PRV-1026, installed in 1977 and rebuilt in 1990, capacity: 275 pounds of fiberglass reinforced plastic parts per hour.

- (dd) One (1) HPM Corporation Injection Molding Press, known as PR-1571, installed in 1998, capacity: 188 pounds of fiberglass reinforced plastic parts per hour.

Emission Units Removed From Source

- (ee) One (1) Hannifin 150 ton reinforced plastic molding press, known as PR-0111, installed in 1973, capacity: 105 pounds of fiberglass reinforced plastic parts per hour.
- (ff) One (1) Hannifin 200 ton reinforced plastic molding press, known as PR-0212, installed in 1973, capacity: 141 pounds of fiberglass reinforced plastic parts per hour.
- (gg) One (1) R and D reinforced plastic molding press, known as PR-011-RD, installed in 1965 and rebuilt in 1986, with an unknown capacity.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new facilities proposed at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, rated at a total of 69.9 million British thermal units per hour, including:
 - (1) One (1) hook oven, known as BO-PH, installed in 1991, exhausted to stack Q, rated at 0.4 million British thermal units per hour, capacity: 10 pounds of waste per hour. (326 IAC 4-2-2)
 - (2) One (1) AMU A-shop, rated at: 7.425 million British thermal units per hour.
 - (3) One (1) AMU A-shop, rated at: 5.280 million British thermal units per hour.
 - (4) One (1) AMU B-shop (above bake oven), rated at: 2.4 million British thermal units per hour.
 - (5) One (1) AMU B-shop (above washer), rated at: 2.0 million British thermal units per hour.
 - (6) One horizontal air make-up unit located in the C-shop, rated at 1.75 million British thermal units per hour.
 - (7) One (1) AMU C-shop 24 ft. long paint booth, rated at: 6.0 million British thermal units per hour.
 - (8) One (1) AMU C-shop 32 ft. long paint booth, rated at: 6.0 million British thermal units per hour.
 - (9) One (1) AMU paint kitchen, rated at: 0.880 million British thermal units per hour.
 - (10) One (1) AMU plant, rated at: 3.5 million British thermal units per hour.

- (11) One (1) AMU shipping and receiving, rated at: 7.29 million British thermal units per hour.
 - (12) One (1) AMU SMC, rated at: 3.7 million British thermal units per hour.
 - (13) One (1) AMU SMC warehouse, rated at: 2.2 million British thermal units per hour.
 - (14) One (1) A-shop bake zone #1, rated at: 2.8 million British thermal units per hour.
 - (15) One (1) A-shop bake zone #2, rated at: 2.8 million British thermal units per hour.
 - (16) One (1) B-shop bake oven, rated at: 2.0 million British thermal units per hour.
 - (17) One (1) B-shop dry off, rated at: 2.4 million British thermal units per hour.
 - (18) One (1) C-shop bake zone #1, rated at: 3.2 million British thermal units per hour.
 - (19) One (1) C-shop bake zone #2, rated at: 2.0 million British thermal units per hour.
 - (20) One (1) C-shop dry off, rated at: 3.6 million British thermal units per hour.
 - (21) One (1) gas furnace, rated at: 0.120 million British thermal units per hour.
 - (22) One (1) glue oven (BO-glue), rated at: 0.250 million British thermal units per hour.
 - (23) One (1) horizontal air make-up unit located near the maintenance area, rated at: 1.75 million British thermal units per hour.
 - (24) Space heaters in bonding area, rated at: 0.080 million British thermal units per hour, total.
 - (25) Space heaters in shipping area, rated at: 0.116 million British thermal units per hour, total.
- (b) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
 - (c) Combustion source flame safety purging on startup.
 - (d) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
 - (e) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
 - (f) Cleaners and solvents characterized as follows: having a vapor pressure equal to or less than 2 kiloPascals; 15 millimeters of mercury; or 0.3 pounds per square inch measured at 38EC (100EF) or; having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20EC (68EF); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

- (g) The following equipment related to manufacturing activities not resulting in the emission of HAPS: brazing equipment, cutting torches, soldering equipment, welding equipment. (326 IAC 6-3-2)
- (h) Closed loop heating and cooling systems.
- (i) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (j) Heat exchanger cleaning and repair.
- (k) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. (326 IAC 6-3-2)
- (l) Paved and unpaved roads and parking lots with public access. (326 IAC 6-4)
- (m) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (n) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (o) On-site fire and emergency response training approved by the department.
- (p) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kiloPascals measured at 38EC).
- (q) A laboratory as defined in 326 IAC 2-7-1(21)(D).
- (r) Activities with emissions equal to or less than the following thresholds: Lead (Pb): 0.6 tons per year or 3.29 pounds per day, SO₂: five (5) pounds per hour or twenty-five (25) pounds per day, NO_x: five (5) pounds per hour or twenty-five (25) pounds per day, CO: twenty-five (25) pounds per day, PM: five (5) pounds per hour or twenty-five (25) pounds per day, and VOC: three (3) pounds per hour or fifteen (15) pounds per day:
 - (1) Drilling, Trimming, Sanding of Fiberglass Reinforced Plastic Parts (326 IAC 6-3-2)
 - (2) Bonding of Fiberglass reinforced plastic parts with a two part non-VOC compound
 - (3) Fiberglass reinforced plastic parts washer (No VOC emissions - detergent and DI water), exhausted through stack A.
 - (4) Fiberglass reinforced plastic parts washer (No VOC emissions - detergent and DI water), exhausted through stack F.
- (s) Two (2) buffing table booths with filters and stacks located in the C-shop. (326 IAC 6-3-2)

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) OP 02-06-81-0415, issued on August 1, 1977;

- (b) OP 02-06-81-0448, issued on February 15, 1978;
- (c) OP 02-10-85-0579, issued on November 25, 1981;
- (d) OP 02-10-89-0660, issued on January 22, 1986;
- (e) CP 003-3105-00059, issued on September 7, 1993; and
- (f) MSM 003-11770-00059, issued on May 3, 2000.

All conditions from previous approvals were incorporated into this Part 70 permit.

Enforcement Issue

- (a) IDEM is aware that equipment has been constructed and operated prior to receipt of the proper permit. The subject equipment is listed in this Technical Support Document under the condition entitled *Unpermitted Emission Units and Pollution Control Equipment*. Since the potential to emit VOC from the unpermitted emission units exceeds twenty-five (25) tons per year, a construction permit should have been obtained.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.
- (c) IDEM is aware that the coating used in spray booth SB-A is not in compliance with the following emission limitation contained in CP 003-3105-00059, issued on September 7, 1993:

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
Pursuant to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements), the volatile organic compound (VOC) content of coating applied to the fiberglass reinforced plastic parts shall be limited to 3.5 pounds of VOCs per gallon of coating less water.
- (d) IDEM is reviewing this matter and has taken appropriate action. The compliance schedule in this proposed permit will satisfy the requirements of the above stated requirement.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on May 29, 1996. Additional information was received on November 20, 2000, December 14, 2000, April 30, 2001 and August 27, 2001.

Emission Calculations

See Appendix A (pages 1 through 25 of 25) of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	379
PM ₁₀	371
SO ₂	57.6
VOC	790
CO	41.8
NO _x	91.7

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

HAPS	Potential To Emit (tons/year)
Styrene	221
Xylene	200
MIBK	46.6
MEK	144
Ethylene Glycol	43.2
Ethyl benzene	56.6
Formaldehyde	6.70
Toluene	66.6
Cumene	1.92
Benzene	0.0008
2-(2-butoxyethoxy)	31.0
2-Butoxyethanol	14.1
Diethylene Glycol	107
Methyl Alcohol	11.7
Toluene-2,4-diisocyanate	0.343
Dichlorobenzene	0.0004

HAPS	Potential To Emit (tons/year)
Hexane	0.656
Lead	0.0002
Cadmium	0.0004
Chromium	0.0005
Manganese	0.0001
Nickel	0.0008
Arsenic	0.0004
Beryllium	0.0003
Cadmium	0.0003
Mercury	0.0003
Selenium	0.002
Additional HAPS From Insignificant Activities	1.60
TOTAL	953

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC and PM₁₀ is equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPS is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1999 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	not reported
PM ₁₀	not reported

Pollutant	Actual Emissions (tons/year)
SO ₂	not reported
VOC	92.9
CO	not reported
NO _x	not reported
HAPS	not reported

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility (Installation Dates)	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPS
One (1) Prime Spray Booth (SB-A) (1993)	0.525	0.525	0.00	(a)	0.00	0.00	
One (1) Spray Booth (SB-B) (1973)	3.15	3.15	0.00		0.00	0.00	
One (1) Spray Booth (SB-C24) (1982)	0.320	0.320	0.00		0.00	0.00	
One (1) Spray Booth (SB-C32) (1982)	0.426	0.426	0.00		0.00	0.00	
Three (3) Touch Up Booths (TU-A, TU-B, TU-FNSH)	0.710	0.710	0.00		0.00	0.00	
Two (2) polyester products raw materials compounding lines (SMC-MFG1, SMC-MFG3) (1986)	3.04	3.04	0.00	(b) Less than 246.1	0.00	0.00	(b) Less than 246.1 (e)
Eighteen (18) Reinforced Plastic Molding Presses, (1968 - 1998)	0.00	0.00	0.00		0.00	0.00	

	Limited Potential to Emit (tons/year)						
Process/facility (Installation Dates)	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPS
Two (2) 2500 ton Reinforced Plastic Molding Presses, known as PR-2566 and PR-2567, (2000)	0.00	0.00	0.00		0.00	0.00	(c)
One (1) Boiler, BLR-A, (2000)	1.04	1.04	37.1	0.402	6.14	15.2	0.138
One (1) Boiler, BLR-B, (1974)	0.526	0.526	18.7	0.202	3.09	7.64	0.069
Insignificant Activities	32.5	24.2	1.81	3.23	32.6	68.9	1.60
Total Emissions	42.2	33.9	57.6	less than 250 (d)	41.8	91.7	less than 247.9

- (a) A BACT limit of a total of no more than sixty-six (66) tons of VOC per year for the two (2) spray booths identified as SB-C24 and SB-C32.
- (b) Less than twenty-five (25) tons per year, each, of VOC and HAPS from the two (2) polyester products raw materials compounding lines, identified as SMC-MFG1 and SMC-MFG3. These limits make the requirements of 326 IAC 8-1-6 not applicable. Note that all VOC from these lines are styrene, which is also the only HAP from these lines.
- (c) A total of less than ten (10) tons per year of individual HAPS from each of the two (2) 2500 ton plastic molding presses, identified as 2566 and 2567. This limit makes the requirements of 326 IAC 2-4.1-1 not applicable. The only HAP from these presses is styrene.
- (d) The source has requested a source-wide limit of less than two-hundred fifty (250) tons per year to remain a minor source under PSD rules.
- (e) The overall HAPS limitation for all facilities, excluding the one (1) boiler and insignificant activities is 246.1, the same as the VOC, as potential HAP emissions cannot exceed potential VOC emissions in this case.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment

Pollutant	Status
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Allen County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) The one (1) natural gas fired hook oven, known as BO-PH, is not subject to NSPS Subpart E (40 CFR Part 60.50) and 326 IAC 12, because the paint residues being combusted do not meet the definition of solid waste as defined by 40 CFR Part 60.51(b).
- (b) The one (1) natural gas fired hook oven, identified as BO-PH, is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart EEE because the hook oven is an industrial furnace process which is exempt from this rule.
- (c) The one (1) natural gas fired boiler, using propane or diesel fuel as backup, identified as BLR-A, is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.40c, Subpart Dc), because this boiler has a heat input capacity greater than ten (10) million British thermal units per hour but less than one hundred (100) million British thermal units per hour, and this boiler was installed after June 9, 1989.

Pursuant to 40 CFR 60.42c (d), no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 0.5 lb/MMBTU heat input or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The owner or operator shall keep records pursuant to 40 CFR 60.48c.

- (d) The one (1) natural gas fired boiler, using propane or diesel fuel as backup, identified as BLR-B, is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.40c, Subpart Dc), because this boiler has a heat input capacity less than ten (10) million British thermal units per hour.
- (e) The sixteen (16) resin storage tanks associated with the two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, installed in 1986, are not subject to the requirements of 40 CFR 60.116b, Subpart Kb, because these tanks have storage capacities of less than forty (40) cubic meters.
- (f) The two (2) Fiberglass reinforced plastic parts washers are not subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63.460), Subpart T, because they do not use any halogenated solvents. These units use non-VOC containing detergents and de-ionized water.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

In order to retain its minor source status pursuant to 326 IAC 2-2 (PSD), Meridian Automotive Systems, which is not one of the 28 major source categories, has agreed to limit VOC delivered to the surface coating applicators such that the source-wide potential to emit VOC is less than two-hundred fifty (250) tons per twelve (12) consecutive month period, including insignificant activities.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year) of PM₁₀ and VOC in Allen county. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Opacity Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

- (a) The two (2) 2500 ton reinforced plastic molding presses, known as PR-2566 and PR-2567, were constructed in 2000. Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), the use of resins, cleanup solvents, and other material containing hazardous air pollutants (HAPS) from the two (2) 2,500 ton reinforced plastic molding presses, known as PR-2566 and PR-2567, shall be limited such that the potential to emit (PTE) a single HAP shall be less than ten (10) tons per twelve (12) consecutive month period, each. Therefore, the requirements of 326 IAC 2-4.1-1 do not apply.

- (b) The one (1) boiler, known as BLR-A and the one (1) HPM Corporation Injection Molding Press, known as PR-1571 were constructed after July 23, 1997. Since the potential to emit each individual hazardous air pollutant (HAP) is less than ten (10) tons per year and the potential to emit total HAPS is less than a total of twenty-five (25) tons per year, the requirements of 326 IAC 2-4.1-1 are not applicable.

326 IAC 6-2-3 (Particulate Emissions Limitations for Facilities Constructed prior to September 21, 1983)

- (a) The one (1) boiler, identified as BLR-B, installed in 1974, using natural gas as a primary fuel and propane or diesel fuel as backup fuel, with a total heat input capacity of 8.4 million British thermal units per hour, must comply with the PM emission limitation of 326 IAC 6-2-3. This limitation is based on the following equation is given in 326 IAC 6-2-3:

$$Pt = C \times a \times h / 76.5 \times Q^{0.75} \times N^{0.25}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBTU) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBTu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 MMBtu/hr heat input. The value 0.8 shall be used for Q greater than 1,000 MMBtu/hr heat input.

h = Stack height in feet.

For the one (1) boiler, identified as BLR-B:

$$Pt = 50 \times 0.67 \times 9.0 / 76.5 \times (8.4)^{0.75} \times 1^{0.25} = 0.799 \text{ lb/MMBTu}$$

Pursuant to 326 IAC 6-2-3 (e), PM emissions shall in no case exceed 0.6 pound per million British thermal units heat input.

Based on Appendix A, the worst case potential to emit PM emissions from the one (1) boiler limited to 0.6 pound PM per million British thermal units is 0.526 tons per year.

$$0.526 \text{ tons/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.120 \text{ lb/hr}$$
$$(0.120 \text{ lb/hr} / 8.4 \text{ MMBtu/hr}) = 0.014 \text{ lb PM / MMBtu}$$

Therefore, the one (1) boiler identified as BLR-B will comply with this rule.

326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)

The one (1) boiler, known as BLR-A, firing natural gas as primary fuel and propane or diesel fuel as backup, installed in 2000, rated at 16.7 million British thermal units per hour, must comply with the requirements of 326 IAC 6-2-4. The emission limitation is based on the following equation is given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The total heat input capacity for the source is 25.1 million British thermal units per hour.

$$Pt = 1.09/(25.1)^{0.26} = 0.472 \text{ lb/mmBtu heat input}$$

Based on Appendix A, the potential PM emission rate is:

$$1.04 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.237 \text{ lb/hr}$$
$$(0.237 \text{ lb/hr} / 25.1 \text{ mmBtu/hr}) = 0.009 \text{ lb PM per mmBtu}$$

The worst case PM emissions from the one (1) boiler known as BLR-A are 0.009 pounds of PM per million British thermal units, which is less than the allowable of 0.472 pound per million British thermal units. Therefore, the one (1) boiler known as BLR-A is in compliance with this rule.

326 IAC 6-3-2 (Process Operations)

- (a) The particulate matter (PM) from each of the one (1) prime spray booth, known as SB-A, the one (1) spray booth, known as SB-B, the one (1) spray booth, known as SB-C24, the one (1) spray booth, known as SB-C32, the one (1) prime touch up, known as TU-A, the one (1) prime touch up, known as TU-B, and the one (1) touch up, known as TU-FNSH, shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dry filters shall be in operation at all times these spray booths are in operation, in order to comply with this limit.

- (b) The particulate matter (PM) from the two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, shall be limited to 8.75 pounds per hour, each, when operating at a process weight rate of 6,200 pounds per hour using the following

equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Based on Appendix A, the potential PM emission rate, after controls, is:

$$0.046 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.010 \text{ lb/hr}$$

The PM emissions from the two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, are 0.010 pounds of PM per hour, which is less than the allowable of 8.75 pounds of PM per hour. Therefore, the two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, are in compliance with this rule.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

- (a) Since the potential to emit sulfur dioxide exceeds twenty-five (25) tons per year, the one (1) boiler, known as BLR-A will be subject to 326 IAC 7-1.1. Pursuant to 326 IAC 7-1.1, sulfur dioxide (SO₂) emissions from the proposed boiler when burning diesel fuel shall be limited to 0.5 pounds per million British thermal units heat input. The 0.5 percent sulfur content limit of the diesel fuel will insure that the source will comply with this rule.
- (b) The one (1) boiler, known as BLR-B, is not subject to the requirements of 326 IAC 7-1.1 because the potential to emit sulfur dioxide (SO₂) is less than twenty-five (25) tons per year.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

The facilities at this source consisting of eighteen (18) reinforced plastic molding presses, two (2) 2500 ton reinforced plastic molding presses, two (2) polyester products raw materials compounding lines, one (1) prime spray booth, identified as SB-A, one (1) spray booth, identified as SB-B, two (2) spray booths, known as SB-C24 and SB-C32, emit VOC and may be subject to the requirements of 326 IAC 8-1-6. The following sections discuss the applicability and if appropriate, a BACT determination.

- (a) The eighteen (18) reinforced plastic molding presses and the two (2) 2500 ton reinforced plastic molding presses, constructed after the applicability date of January 1, 1980, are not subject to the requirements of 326 IAC 8-1-6 because each has the potential to emit less than twenty-five (25) tons per year of VOC.
- (b) The input of VOC to the two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, installed in 1986, is limited such that VOC emissions shall be less than twenty-five (25) tons per year, each, to make the requirements of 326 IAC 8-1-6 not applicable.
- (c) The one (1) spray booth, identified as SB-B, installed in June 1973 has the potential to emit volatile organic compounds (VOC) greater than twenty-five (25) tons per year, however it was constructed before the applicability date of January 1, 1980. Therefore, this facility is not subject to Best Available Control Technology (BACT) requirements pursuant to this rule.

- (d) The one (1) prime spray booth, identified as SB-A, constructed after the applicability date of January 1, 1980, has the potential to emit volatile organic compounds (VOC) greater than twenty-five (25) tons per year. Therefore, this facility is subject to Best Available Control Technology (BACT) requirements pursuant to this rule.

Pursuant to CP 003-3105-00059, issued on September 7, 1993, Best Available Control Technology for the one (1) prime spray booth, identified as SB-A, has been determined to be:

- (1) The method of application at the one (1) prime spray booth, identified as SB-A, shall be performed with high volume-low pressure (HVLP) spray applicators;
- (2) The use of lower VOC paints (less than 3.5 lb VOC per gallon of coating excluding water).

Based on correspondence dated August 28, 2001 and August 29, 2001, the 3.5 pound per gallon of coating less water VOC content limit shall be complied with on a monthly volume weighted average basis.

- (e) The two (2) spray booths, known as SB-C24 and SB-C32, have the potential to emit volatile organic compounds (VOC) greater than twenty-five (25) tons per year, each. Therefore, these facilities are subject to Best Available Control Technology (BACT) requirements pursuant to this rule.

A top-down BACT analysis from Meridian Automotive Systems was received on April 30, 2001, with additional information received August 27, 2001. This analysis evaluated three (3) options: coating material substitutions, types of coating applicators, and add on control technology consisting of: solvent recovery, zeolite and carbon rotors, carbon adsorbers, liquid scrubbers, biofilters, recirculation, recuperative incineration, regenerative incineration, and catalytic incineration. Most of these options were not technically feasible for Meridian Automotive Systems. After a cost analysis, all methods of incineration were deemed economically infeasible. The following sections discuss each of the options.

(1) Coating Material Substitutions

Currently these two (2) booths have the combined potential to emit VOC of 163.6 tons per year. A baseline combined emission rate of sixty-six (66) tons per year was used in the BACT analysis. This baseline was chosen as a reasonable, obtainable limit for these emission units that will also allow the entire source to remain a minor source with respect to PSD rules. Meridian Automotive Systems maintains that the use of low (25-40%) and medium (41-50%) solids content coatings are the best that can be achieved to meet customers specifications. The paint system used at Meridian Automotive Systems is a two (2) component system (basecoat/clearcoat). The chemistry of these two (2) types of coatings is different. The source also coats automotive components, which have very demanding surface quality appearance specifications. The paint system at Meridian Automotive Systems, Ashley plant is a single component coating. Also, farm implement components are coated at Ashley, and the surface quality appearance specifications are not as demanding.

Therefore while the use of medium (41-50%) and high (no less than 51%) solids content paints are technically feasible at both the Ashley and Grabill plants, these paints are not applicable at Grabill due to differences in customer specifications for

coating finishes. Switching coatings would result in lost customers and is therefore not economically feasible.

(2) **Coating Application**

Electrostatic spray applicators have been installed at spray booth SB-C24. Engineering and cost studies have been completed to convert spray booth SB-C32 to electrostatic spray guns. This conversion will occur before issuance of this permit.

(3) **Solvent Recovery**

Solvent recovery is not appropriate for this type of coating operation because multi-solvent mixtures are used in the coatings and would not be recovered in their original formulation for reuse. Recovery operations (steam condensation, refrigeration) are usually reserved for single solvent streams, and those that are high in concentration (6,000-8,000 ppm).

(4) **Zeolite and Carbon Rotors**

Based upon the cost analysis submitted by Meridian Automotive Systems, the use of zeolite and carbon rotors was deemed not economically feasible.

(5) **Carbon Adsorbers**

Carbon adsorbers are large and heavy units which operate in batch mode, and are typically steam stripped, creating secondary wastewater treatment problems. Carbon adsorbers are typically not used in the coating industry because while they are technically feasible they are not desirable due to the wastewater treatment concerns.

(6) **Liquid Scrubbers and Biofilters**

Liquid scrubbers create secondary wastewater treatment problems and are usually reserved for applying chemical oxidation/reduction for odor control. Therefore, the use of liquid scrubbers are not technically feasible.

Biofilters are very sensitive to upsets, have a long start-up time and may require supplemental nutrients for operation. Biofilters are not used for industrial paint operations control since they are not feasible.

(7) **Recirculation**

Recirculation is a technique applied to paint spray booth exhaust to concentrate the solvent laden exhaust and reduce the total gas volume treated. Due to the high concentration build-up in the booth, recirculation is not commonly used for manual spraying operations because of worker exposure. In practice, about 80% of the exhaust is recirculated, with 20% bled off to the control system. Concentrations may approach 25% of the lower explosive limit (LEL), but may be kept as low as 10% of the LEL. These levels are much greater than acceptable Threshold Limit Levels established by OSHA for worker health (8 hour time weighted average). Data for two (2) of the most prevalent paint solvents used – toluene and methyl ethyl ketone – are shown below. The LELs are typically expressed as a percentage of gas exhaust (1% = 10,000 ppm), whereas TLVs are expressed in parts per

million (ppm). For some compounds, Short Term Exposure Limits (STELs), have been established which describe a maximum concentration that workers should avoid (15 minute exposure), even when the TLV is met.

Solvent Compound	TLV (ppm) ¹	STE (ppm) ¹	LEL (% by volume) ²	10% LEL (ppm)
Toluene	50	(NA)	1.17 (11,700 ppm)	1, 170
Methyl Ethyl Ketone (MEK)	200	300	2.05 (20,500 ppm)	2,050

(1) Threshold Limit Values for Chemical Substances and Physical Agents, 2nd Printing, 1996, American Conference of American Industrial Hygienists

(2) Industrial Hygiene & Toxicology; Patty, Frank, A.; 1958, Interscience Publishers, Inc.; New York; pp. 515-516, Table 10.

As shown above, the recirculated booth air concentration (10% of LEL or greater) is several orders of magnitude greater than the OSHA prescribed safe levels. If Meridian Automotive Systems attempted this control approach, it would either have to re-equip its booths with robotic spray apparatus, or the workers would have to be protected with full body pressurized suits and individual air supplies. While the latter has been done in some special situations, it is unpopular with workers and not a method of choice. For all these reasons while recirculation is technical feasible the negative environmental and health impacts exceed the benefit of this control option.

(8) **Incineration**

The capital costs and annual operating costs required for the incinerators are not economically feasible for Meridian Automotive Systems. The range of cost in dollars per tons removed using a baseline of 66 tons per year for the entire surface coating line was \$10,838 per ton associated with recuperative incineration on the spray booth C24 with one (1) stack, to \$29,422 per ton associated with regenerative incineration on the spray booth C32, with one (1) stack.

Therefore, BACT for these two (2) spray booths, identified as SB-C24 and SB-C32 has been determined to be:

- (a) The VOC input delivered to the applicators including cleanup solvents shall be limited to a total of no more than sixty-six (66) tons per twelve (12) consecutive month period;
- (b) The method of application at the spray booths shall be done with electrostatic applicators;
- (c) The use of low (25-40%) and medium (41-50%) solids content coatings, and
- (d) The following management and work practices shall apply:
 - (1) Operator training course.
 - (2) Spray gun cleaning.

- (3) The cleanup solvent containers used to transport solvent from drums to work stations be closed containers having soft gasketed closures.
- (4) The application equipment operators shall be instructed and trained on the methods and practices utilized to minimize spillage on the floor and over application.
- (5) Storage containers used to store VOC and/or HAPS containing materials shall be kept covered when not in use.
- (6) Cleanup solvents will be reused in the process as much as possible to reduce hazardous waste and the related impact on the environment.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) are not applicable to the spray booths because fiberglass reinforced plastic parts are being coated, not metal.

326 IAC 8-6-1 (Organic Solvent Emission Limitations)

- (a) The requirements of 326 IAC 8-6-1 (Organic Solvent Emission Limitations) are not applicable to the one (1) spray booth, identified as SB-B, because this facility was constructed prior to the October 7, 1974 applicability date of this rule.
- (b) The requirements of 326 IAC 8-6-1 (Organic Solvent Emission Limitations) are not applicable to the one (1) prime touch up, known as TU-A, the one (1) prime touch up, known as TU-B, the one (1) touch up, known as TU-FNSH, the one (1) Hannifan 200 ton reinforced plastic molding press, known as PR-0206, the one (1) Hannifan 200 ton reinforced plastic molding press, known as PR-0213, the one (1) Erie 1500 ton vacuum assisted reinforced plastic molding press, known as PRV-1558, the one (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2024, and the one (1) W-W-M 2000 ton vacuum assisted reinforced plastic molding press, known as PRV-2025 because even though these facilities were constructed between the rule applicability dates of October 7, 1974 and January 1, 1980, the total potential to emit of these facilities is less than one-hundred (100) tons per year.

State Rule Applicability - Insignificant Activities

326 IAC 4-2-2 (Incinerators)

Pursuant to 326 IAC 4-2-2, the one (1) hook oven, known as BO-PH, which serves as an incinerator of paint, which is considered a waste material, shall:

- (a) Consist of primary and secondary chambers or the equivalent;
- (b) Be equipped with a primary burner unless burning wood products;
- (c) Comply with 326 IAC 5-1 (Opacity Limitations) and 326 IAC 2 (Permit Review Rules);
- (d) Be maintained properly as specified by the manufacturer and approved by IDEM;
- (e) Be operated according to the manufacturer's recommendation and only burn waste approved by IDEM;

- (f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
- (g) Be operated so that emissions of hazardous materials including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented;
- (h) Not create a nuisance or a fire hazard; and
- (i) Not emit particulate matter (PM) in excess of 0.5 pounds per 1,000 pounds of dry exhaust gas corrected to fifty percent (50%) excess air.

The operation of the incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements.

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the buffing, brazing, cutting, soldering, welding and trimming, drilling and sanding operations shall not exceed allowable PM emission rate based on the following equations:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

326 IAC 8-3 (Organic Solvent Degreasing Operations)

The two (2) fiberglass reinforced plastic parts washers are not subject to the requirements of 326 IAC 8-3 because these washers use non-VOC containing detergents and de-ionized water to wash plastic parts prior to painting.

Testing Requirements

Testing is not being required since AP-42 emission factors have been used to calculate VOC and HAPS emissions from the closed molding operations. The emissions from the remaining surface coating operations are dependant on usage records and Material Safety Data Sheets (MSDS).

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitor-

ing conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

Please note that there are no compliance monitoring requirements for the two (2) polyester products raw materials compounding lines, known as SMC-MFG 1 and SMC-MFG3, because there is a control device associated with this facility and the allowable emissions are less than ten (10) pounds per hour.

The compliance monitoring requirements applicable to this source are as follows:

- (a) The two (2) boilers, Known as BLR-A and BLR-B, have applicable compliance monitoring conditions as specified below:

Visible emission notations of the boiler stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere when burning diesel fuel. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

These monitoring conditions are necessary because the boilers must operate properly to ensure compliance with 326 IAC 6-2-3 (Particulate Emissions Limitations for Facilities Constructed prior to September 21, 1983), 326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983), 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), 40 CFR 60 Subpart Dc, and 326 IAC 2-7 (Part 70).

- (b) The four (4) spray booths, known as SB-A, SB-B, SB-C24, and SB-C32, and the three (3) touch up booths, known as TU-A, TU-B, and TU-FNSH, have applicable compliance monitoring conditions as specified below:

- (1) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters for the spray booths and the touch up booths. To monitor the performance of the dry filters, weekly observations shall be made of the overspray while the four (4) spray booths and three (3) touch up booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (2) Monthly inspections shall be performed of the coating emissions from the four (4) spray booths and three (3) touch up booths stack exhausts, known as stacks B, C, D, E, G, H, I, J, K, L, and P for the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an overspray emission, evidence of overspray emission, or other abnormal emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which

should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (3) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

These monitoring conditions are necessary because the dry filters for the spray booths and touch up booths must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 2-7 (Part 70).

Conclusion

The operation of this high-pressure fiberglass-reinforced plastics manufacturing and painting source shall be subject to the conditions of the attached proposed **Part 70 Permit No. T 003-5942-00059**.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****Company Name: Meridian Automotive Systems****Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741****Boiler A****Part 70: T 003-5942****Plt ID: 003-00059****Reviewer: Craig J. Friederich****Date: May 26, 1996**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

16.70

146.29

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.139	0.556	0.044	**see below	0.402	6.14

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations

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Natural Gas Combustion Only**MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: Meridian Automotive Systems****Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741****Part 70: T 003-5942****Plt ID: 003-00059****Reviewer: Craig J. Friederich****Date: May 26, 1996****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	1.536E-04	8.778E-05	5.486E-03	1.317E-01	2.487E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPS
Potential Emission in tons/yr	3.657E-05	8.046E-05	1.024E-04	2.780E-05	1.536E-04	0.138

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Small Industrial Boiler****Company Name: Meridian Automotive Systems****Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741****Boiler B****Part 70: T 003-5942****Plt ID: 003-00059****Reviewer: Craig J. Friederich****Date: May 26, 1996**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

8.40

73.58

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.070	0.280	0.022	**see below	0.202	3.09

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 4 for HAPs emissions calculations.

Appendix A: Emissions Calculations

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Natural Gas Combustion Only**MM BTU/HR <100****Small Industrial Boiler****HAPs Emissions****Company Name: Meridian Automotive Systems****Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741****Part 70: T 003-5942****Plt ID: 003-00059****Reviewer: Craig J. Friederich****Date: May 26, 1996****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	7.726E-05	4.415E-05	2.759E-03	6.623E-02	1.251E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPS
Potential Emission in tons/yr	1.840E-05	4.047E-05	5.151E-05	1.398E-05	7.726E-05	0.069

Methodology is the same as page 3.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil

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Company Name: Meridian Automotive Systems
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

S = Weight % Sulfur

0.5

16.7

1044.94286

Emission Factor in lb/kgal	Pollutant				
	PM*	SO ₂	NO _x	VOC	CO
	2.0	71 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr	1.04	37.1	10.4	0.178	2.61

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 6 for HAPs emission calculations.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
HAPs Emissions

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Company Name: Meridian Automotive Systems
Address, City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

HAPs - Metals

Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	2.93E-04	2.19E-04	2.19E-04	2.19E-04	6.58E-04

HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05	Total HAPs
Potential Emission in tons/yr	2.19E-04	4.39E-04	2.19E-04	1.10E-03	3.58E-03

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil

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Company Name: Meridian Automotive Systems
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

BLR-B

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

S = Weight % Sulfur
0.5

8.4

525.6

Emission Factor in lb/kgal	Pollutant				
	PM*	SO ₂	NO _x	VOC	CO
	2.0	71 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr	0.526	18.7	5.26	0.089	1.31

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 8 for HAPs emission calculations.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
HAPs Emissions

Page 8 of 25 TSD App A

Company Name: Meridian Automotive Systems
Address, City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

HAPs - Metals

Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	1.47E-04	1.10E-04	1.10E-04	1.10E-04	3.31E-04

HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05	Total HAPs
Potential Emission in tons/yr	1.10E-04	2.21E-04	1.10E-04	5.52E-04	1.80E-03

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

Appendix A: Emission Calculations Propane as Back-Up

Page 9 of 25 TSD AppA

Company Name: Meridian Automotive Systems
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

BLR-A

Heat Input Capacity MMBtu/hr <div style="border: 1px solid black; padding: 2px; width: 100px; margin-top: 10px;">16.70</div>	Potential Throughput kgals/year <div style="border: 1px solid black; padding: 2px; width: 100px; margin-top: 10px;">1598.82</div>	SO2 Emission factor = 86.5 x S S = Sulfur Content = <div style="border: 1px solid black; padding: 2px; width: 80px; margin-top: 10px;">0.0093</div>
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Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.6	0.6	0.804 (86.5S)	19.0	0.25	3.2
Potential Emission in tons/yr	0.480	0.480	0.643	15.2	0.200	2.56

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM, therefore PM10 is filterable only as well.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

Fires 6.22 SCC 01-010-02

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

Appendix A: Emission Calculations Propane as Back-Up

Page 10 of 25 TSD AppA

Company Name: Meridian Automotive Systems
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

BLR-B

Heat Input Capacity
MMBtu/hr

Potential Throughput
kgals/year

SO₂ Emission factor = 86.5 x S

S = Sulfur Content =

0.0093

8.40

804.20

Emission Factor in lb/kgal	Pollutant					
	PM*	PM10*	SO ₂	NO _x	VOC	CO
	0.6	0.6	0.804 (86.5S)	19.0	0.25	3.2
Potential Emission in tons/yr	0.241	0.241	0.323	7.64	0.101	1.29

*PM emission factor is filterable PM only. PM10 emission factor is assumed to be the same as PM, therefore PM10 is filterable only as well.

Methodology

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

Fires 6.22 SCC 01-010-02

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission (tons/yr) = Throughput (kgals/yr) x Emission Factor (lb/kgal) / 2,000 lb/ton

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Page 11 of 25 TSD App A

Company Name: Meridian Automotive Systems, Inc.
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741-0189
Part 70: T 003-5942
Pit ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 29, 1996

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
SB-A Paint (Prime Coatings)																
Installed in 1993																
8000 SW BC-17	10.08	49.45%	0.0%	49.5%	0.0%	34.04%	5.00	1.00	4.98	4.98	24.92	598.15	109.16	27.90	14.64	75%
8015 SW G58AR1	9.16	55.38%	0.0%	55.4%	0.0%	30.40%	5.00	1.00	5.07	5.07	25.36	608.74	111.09	22.38	16.69	75%
8023 Red Spot Ebony	8.41	55.46%	0.0%	55.5%	0.0%	35.49%	5.00	1.00	4.66	4.66	23.32	559.70	102.15	20.51	13.14	75%
8025 Cooks Beige	10.27	46.42%	0.0%	46.4%	0.0%	32.80%	5.00	1.00	4.77	4.77	23.84	572.08	104.40	30.13	14.53	75%
8050 SO Storm Gray	8.16	60.95%	0.0%	61.0%	0.0%	27.76%	5.00	1.00	4.97	4.97	24.87	596.82	108.92	17.45	17.92	75%
8064 SW Med Mist	9.26	44.71%	0.0%	44.7%	0.0%	42.40%	5.00	1.00	4.14	4.14	20.70	496.82	90.67	28.03	9.76	75%
8065 SW Camel Tan	9.46	44.10%	0.0%	44.1%	0.0%	42.40%	5.00	1.00	4.17	4.17	20.86	500.62	91.36	28.95	9.84	75%
8066 Dark Slate	8.86	51.25%	0.0%	51.3%	0.0%	36.80%	5.00	1.00	4.54	4.54	22.70	544.89	99.44	23.65	12.34	75%
8067 SW Med Fawn	10.06	40.83%	0.0%	40.8%	0.0%	43.20%	5.00	1.00	4.11	4.11	20.54	492.90	89.95	32.59	9.51	75%
8116 SW AC-601	9.38	35.52%	0.0%	35.5%	0.0%	52.00%	5.00	1.00	3.33	3.33	16.66	399.81	72.97	33.11	6.41	75%
8118 Akzo 40431CN	9.17	58.81%	0.0%	58.8%	0.0%	36.80%	5.00	1.00	5.39	5.39	26.96	647.15	118.10	20.68	14.65	75%
8119 RS Graphite	8.17	60.42%	0.0%	60.4%	0.0%	31.36%	5.00	1.00	4.94	4.94	24.68	592.36	108.11	17.70	15.74	75%
8120 SO BP-9471	9.13	41.55%	0.0%	41.6%	0.0%	47.12%	5.00	1.00	3.79	3.79	18.97	455.22	83.08	29.22	8.05	75%
8159 Akzo 224C	10.02	55.99%	0.0%	56.0%	0.0%	43.04%	5.00	1.00	5.61	5.61	28.05	673.22	122.86	24.14	13.03	75%
8616 SW Gray	11.20	42.97%	0.0%	43.0%	0.0%	35.05%	5.00	1.00	4.81	4.81	24.06	577.52	105.40	34.97	13.73	75%

State Potential Emissions	Add worst case coating to all solvents	PM	Control Efficiency	98.50%												
			Uncontrolled		28.1	673	123	35.0								
			Controlled		28.1	673	123	0.525								

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
SB-B Paint (Prime Coatings)																
Installed in 1980																
8000 SW BC-17	10.08	49.45%	0.0%	49.5%	0.0%	34.04%	10.00	1.00	4.98	4.98	49.85	1196.29	218.32	167.39	14.64	25%
8015 SW G58AR1	9.16	55.38%	0.0%	55.4%	0.0%	30.40%	10.00	1.00	5.07	5.07	50.73	1217.47	222.19	134.26	16.69	25%
8023 Red Spot Ebony	8.41	55.46%	0.0%	55.5%	0.0%	35.49%	10.00	1.00	4.66	4.66	46.64	1119.40	204.29	123.05	13.14	25%
8025 Cooks Beige	10.27	46.42%	0.0%	46.4%	0.0%	32.80%	10.00	1.00	4.77	4.77	47.67	1144.16	208.81	180.76	14.53	25%
8050 SO Storm Gray	8.16	60.95%	0.0%	61.0%	0.0%	27.76%	10.00	1.00	4.97	4.97	49.74	1193.64	217.84	104.68	17.92	25%
8064 SW Med Mist	9.26	44.71%	0.0%	44.7%	0.0%	42.40%	10.00	1.00	4.14	4.14	41.40	993.64	181.34	168.19	9.76	25%
8065 SW Camel Tan	9.46	44.10%	0.0%	44.1%	0.0%	42.40%	10.00	1.00	4.17	4.17	41.72	1001.25	182.73	173.72	9.84	25%
8066 Dark Slate	8.86	51.25%	0.0%	51.3%	0.0%	36.80%	10.00	1.00	4.54	4.54	45.41	1089.78	198.88	141.89	12.34	25%
8067 SW Med Fawn	10.06	40.83%	0.0%	40.8%	0.0%	43.20%	10.00	1.00	4.11	4.11	41.07	985.80	179.91	195.54	9.51	25%
8116 SW AC-601	9.38	35.52%	0.0%	35.5%	0.0%	52.00%	10.00	1.00	3.33	3.33	33.32	799.63	145.93	198.68	6.41	25%
8118 Akzo 40431CN	9.17	58.81%	0.0%	58.8%	0.0%	36.80%	10.00	1.00	5.39	5.39	53.93	1294.29	236.21	124.08	14.65	25%
8119 RS Graphite	8.17	60.42%	0.0%	60.4%	0.0%	31.36%	10.00	1.00	4.94	4.94	49.36	1184.72	216.21	106.23	15.74	25%
8120 SO BP-9471	9.13	41.55%	0.0%	41.6%	0.0%	47.12%	10.00	1.00	3.79	3.79	37.94	910.44	166.16	175.30	8.05	25%
8159 Akzo 224C	10.02	55.99%	0.0%	56.0%	0.0%	43.04%	10.00	1.00	5.61	5.61	56.10	1346.45	245.73	144.86	13.03	25%
8616 SW Gray	11.20	42.97%	0.0%	43.0%	0.0%	35.05%	10.00	1.00	4.81	4.81	48.13	1155.03	210.79	209.82	13.73	25%

State Potential Emissions	Add worst case coating to all solvents	PM	Control Efficiency	98.50%												
			Uncontrolled		56.1	1346	246	210								
			Controlled		56.1	1346	246	3.15								

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
SB-C24 Topcoat Coating																
Installed in 1982																
8062 Deep Amethyst	8.00	60.42%	0.0%	60.4%	0.0%	30.36%	3.00	1.00	4.83	4.83	14.50	348.02	63.51	12.48	15.92	70%
8073 Deep Slate	7.90	59.28%	0.0%	59.3%	0.0%	33.31%	3.00	1.00	4.68	4.68	14.05	337.18	61.54	12.68	14.06	70%
8076 Strawberry	8.34	51.88%	0.0%	51.9%	0.0%	38.88%	3.00	1.00	4.33	4.33	12.98	311.53	56.85	15.82	11.13	70%
8078 Poppy Red	7.98	54.93%	0.0%	54.9%	0.0%	36.87%	3.00	1.00	4.38	4.38	13.15	315.61	57.60	14.18	11.89	70%
8079 Candy Apple	8.25	55.53%	0.0%	55.5%	0.0%	35.46%	3.00	1.00	4.58	4.58	13.74	329.85	60.20	14.46	12.92	70%
8097 Clear	8.25	44.68%	0.0%	44.7%	0.0%	48.52%	3.00	1.00	3.69	3.69	11.06	265.40	48.44	17.99	7.60	70%
8107 Shale Green	8.01	58.49%	0.0%	58.5%	0.0%	33.53%	3.00	1.00	4.69	4.69	14.06	337.32	61.56	13.11	13.97	70%
8109 Deep Hunter Green	8.06	52.75%	0.0%	52.8%	0.0%	39.44%	3.00	1.00	4.25	4.25	12.75	306.12	55.87	15.01	10.78	70%
8112 Bright Silver Met	8.11	61.08%	0.0%	61.1%	0.0%	32.20%	3.00	1.00	4.95	4.95	14.86	356.66	65.09	12.44	15.38	70%
8113 Patriot Blue PC	8.01	56.93%	0.0%	56.9%	0.0%	36.15%	3.00	1.00	4.56	4.56	13.68	328.33	59.92	13.60	12.61	70%
8114 Aquamarine Met	7.95	64.06%	0.0%	64.1%	0.0%	28.38%	3.00	1.00	5.09	5.09	15.28	366.68	66.92	11.26	17.94	70%
8117 Inferno Red PC	8.15	56.63%	0.0%	56.6%	0.0%	34.02%	3.00	1.00	4.62	4.62	13.85	332.30	60.65	13.93	13.57	70%
8172 Ice Silver	8.25	64.71%	0.0%	64.7%	0.0%	27.82%	3.00	1.00	5.34	5.34	16.02	384.38	70.15	11.48	19.19	70%
8174 Bright White	9.72	44.39%	0.0%	44.4%	0.0%	37.64%	3.00	1.00	4.31	4.31	12.94	310.66	56.70	21.31	11.46	70%
8175 Radiant Fire Red	8.01	53.26%	0.0%	53.3%	0.0%	37.66%	3.00	1.00	4.27	4.27	12.80	307.16	56.06	14.76	11.33	70%
8176 Primal Red	8.21	54.91%	0.0%	54.9%	0.0%	36.07%	3.00	1.00	4.51	4.51	13.52	324.58	59.24	14.59	12.50	70%
8178 Cocoon White	8.71	50.37%	0.0%	50.4%	0.0%	39.54%	3.00	1.00	4.39	4.39	13.16	315.88	57.65	17.04	11.10	70%
8181 Black	8.10	54.54%	0.0%	54.5%	0.0%	38.28%	3.00	1.00	4.42	4.42	13.25	318.08	58.05	14.52	11.54	70%
8184 Island Teal	8.20	54.95%	0.0%	55.0%	0.0%	36.78%	3.00	1.00	4.51	4.51	13.52	324.45	59.21	14.56	12.25	70%
8186 Golden White	8.02	51.73%	0.0%	51.7%	0.0%	41.23%	3.00	1.00	4.15	4.15	12.45	298.71	54.51	15.26	10.06	70%
8188 Champagne	8.62	56.53%	0.0%	56.5%	0.0%	35.08%	3.00	1.00	4.87	4.87	14.62	350.85	64.03	14.77	13.89	70%
8189 Cranberry	8.19	52.34%	0.0%	52.3%	0.0%	39.56%	3.00	1.00	4.29	4.29	12.86	308.64	56.33	15.39	10.84	70%
8191 Slate Blue	8.17	61.68%	0.0%	61.7%	0.0%	31.49%	3.00	1.00	5.04	5.04	15.12	362.83	66.22	12.34	16.00	70%
8192 Modern Blue	8.02	57.07%	0.0%	57.1%	0.0%	35.30%	3.00	1.00	4.58	4.58	13.73	329.55	60.14	13.57	12.97	70%
8194 Dark Green	7.94	60.83%	0.0%	60.8%	0.0%	31.54%	3.00	1.00	4.83	4.83	14.49	347.75	63.46	12.26	15.31	70%

State Potential Emissions	Add worst case coating to all solvents	PM	Control Efficiency	98.50%				
			Uncontrolled		16.0	384	70.1	21.3
			Controlled		16.0	384	70.1	0.320

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
SB-C32 Topcoat Coating																
Installed in 1982																
8062 Deep Amethyst	8.00	60.42%	0.0%	60.4%	0.0%	30.36%	4.00	1.00	4.83	4.83	19.33	464.03	84.68	16.64	15.92	70%
8073 Deep Slate	7.90	59.28%	0.0%	59.3%	0.0%	33.31%	4.00	1.00	4.68	4.68	18.73	449.58	82.05	16.91	14.06	70%
8076 Strawberry	8.34	51.88%	0.0%	51.9%	0.0%	38.88%	4.00	1.00	4.33	4.33	17.31	415.37	75.81	21.09	11.13	70%
8078 Poppy Red	7.98	54.93%	0.0%	54.9%	0.0%	36.87%	4.00	1.00	4.38	4.38	17.53	420.81	76.80	18.90	11.89	70%
8079 Candy Apple	8.25	55.53%	0.0%	55.5%	0.0%	35.46%	4.00	1.00	4.58	4.58	18.32	439.80	80.26	19.28	12.92	70%
8097 Clear	8.25	44.68%	0.0%	44.7%	0.0%	48.52%	4.00	1.00	3.69	3.69	14.74	353.87	64.58	23.99	7.60	70%
8107 Shale Green	8.01	58.49%	0.0%	58.5%	0.0%	33.53%	4.00	1.00	4.69	4.69	18.74	449.76	82.08	17.48	13.97	70%
8109 Deep Hunter Green	8.06	52.75%	0.0%	52.8%	0.0%	39.44%	4.00	1.00	4.25	4.25	17.01	408.16	74.49	20.02	10.78	70%
8112 Bright Silver Met	8.11	61.08%	0.0%	61.1%	0.0%	32.20%	4.00	1.00	4.95	4.95	19.81	475.54	86.79	16.59	15.38	70%
8113 Patriot Blue PC	8.01	56.93%	0.0%	56.9%	0.0%	36.15%	4.00	1.00	4.56	4.56	18.24	437.77	79.89	18.13	12.61	70%
8114 Aquamarine Met	7.95	64.06%	0.0%	64.1%	0.0%	28.38%	4.00	1.00	5.09	5.09	20.37	488.91	89.23	15.02	17.94	70%
8117 Inferno Red PC	8.15	56.63%	0.0%	56.6%	0.0%	34.02%	4.00	1.00	4.62	4.62	18.46	443.07	80.86	18.58	13.57	70%
8172 Ice Silver	8.25	64.71%	0.0%	64.7%	0.0%	27.82%	4.00	1.00	5.34	5.34	21.35	512.50	93.53	15.30	19.19	70%
8174 Bright White	9.72	44.39%	0.0%	44.4%	0.0%	37.64%	4.00	1.00	4.31	4.31	17.26	414.21	75.59	28.41	11.46	70%
8175 Radiant Fire Red	8.01	53.26%	0.0%	53.3%	0.0%	37.66%	4.00	1.00	4.27	4.27	17.06	409.55	74.74	19.68	11.33	70%
8176 Primal Red	8.21	54.91%	0.0%	54.9%	0.0%	36.07%	4.00	1.00	4.51	4.51	18.03	432.78	78.98	19.46	12.50	70%
8178 Cocoon White	8.71	50.37%	0.0%	50.4%	0.0%	39.54%	4.00	1.00	4.39	4.39	17.55	421.17	76.86	22.72	11.10	70%
8181 Black	8.10	54.54%	0.0%	54.5%	0.0%	38.28%	4.00	1.00	4.42	4.42	17.67	424.10	77.40	19.35	11.54	70%
8184 Island Teal	8.20	54.95%	0.0%	55.0%	0.0%	36.78%	4.00	1.00	4.51	4.51	18.02	432.60	78.95	19.41	12.25	70%
8186 Golden White	8.02	51.73%	0.0%	51.7%	0.0%	41.23%	4.00	1.00	4.15	4.15	16.59	398.28	72.69	20.35	10.06	70%
8188 Champagne	8.62	56.53%	0.0%	56.5%	0.0%	35.08%	4.00	1.00	4.87	4.87	19.49	467.80	85.37	19.69	13.89	70%
8189 Cranberry	8.19	52.34%	0.0%	52.3%	0.0%	39.56%	4.00	1.00	4.29	4.29	17.15	411.52	75.10	20.52	10.84	70%
8191 Slate Blue	8.17	61.68%	0.0%	61.7%	0.0%	31.49%	4.00	1.00	5.04	5.04	20.16	483.77	88.29	16.46	16.00	70%
8192 Modern Blue	8.02	57.07%	0.0%	57.1%	0.0%	35.30%	4.00	1.00	4.58	4.58	18.31	439.39	80.19	18.10	12.97	70%
8194 Dark Green	7.94	60.83%	0.0%	60.8%	0.0%	31.54%	4.00	1.00	4.83	4.83	19.32	463.67	84.62	16.35	15.31	70%

State Potential Emissions	Add worst case coating to all solvents	PM	Control Efficiency	98.50%				
			Uncontrolled		21.4	513	93.5	28.4
			Controlled		21.4	513	93.5	0.426

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
TU-A Paint (Air Dry Prime Coating)																
Installed prior to 1980																
8001 Cooks Air Dry	10.19	33.05%	0.0%	33.1%	0.0%	32.80%	0.25	1.00	3.37	3.37	0.84	20.21	3.69	5.60	10.27	25%
8002 BC-17 Air Dry	10.09	49.59%	0.0%	49.6%	0.0%	34.05%	0.25	1.00	5.00	5.00	1.25	30.02	5.48	4.18	14.69	25%
8004 AC-17 Air Dry	10.06	52.74%	0.0%	52.7%	0.0%	28.74%	0.25	1.00	5.31	5.31	1.33	31.83	5.81	3.90	18.46	25%
8005 Grayfill	17.16	14.36%	0.0%	14.4%	0.0%	68.39%	0.25	1.00	2.46	2.46	0.62	14.79	2.70	12.07	3.60	25%

State Potential Emissions	Add worst case coating to all solvents	PM	Control Efficiency	98.50%												
			Uncontrolled		1.33	31.8	5.81	12.1								
			Controlled		1.33	31.8	5.81	0.181								

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
TU-B Paint (Air Dry Prime Coating)																
Installed prior to 1980																
8001 Cooks Air Dry	10.19	33.05%	0.0%	33.1%	0.0%	32.80%	0.25	1.00	3.37	3.37	0.84	20.21	3.69	5.60	10.27	25%
8002 BC-17 Air Dry	10.09	49.59%	0.0%	49.6%	0.0%	34.05%	0.25	1.00	5.00	5.00	1.25	30.02	5.48	4.18	14.69	25%
8004 AC-17 Air Dry	10.06	52.74%	0.0%	52.7%	0.0%	28.74%	0.25	1.00	5.31	5.31	1.33	31.83	5.81	3.90	18.46	25%
8005 Grayfill	17.16	14.36%	0.0%	14.4%	0.0%	68.39%	0.25	1.00	2.46	2.46	0.62	14.79	2.70	12.07	3.60	25%

State Potential Emissions	Add worst case coating to all solvents	PM	Control Efficiency	98.50%												
			Uncontrolled		1.33	31.8	5.81	12.1								
			Controlled		1.33	31.8	5.81	0.181								

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
TU-FNSH																
Installed prior to 1980																
8003 Perky Pink	11.83	40.34%	0.0%	40.3%	0.0%	35.14%	1.00000	1.000	4.77	4.77	4.77	114.53	20.90	23.18	13.58	25%

State Potential Emissions	Add worst case coating to all solvents	PM	Control Efficiency	98.50%												
			Uncontrolled		4.77	115	20.9	23.2								
			Controlled		4.77	115	20.9	0.348								

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

**VOC, HAP and Particulate
From Closed Molding Operations**

Company Name: Meridian Automotive Systems
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

Material	Usage (tons/hour)	Emission Factor (lbs/ton)	Emission Rate(lb/hr)	Maximum Uncontrolled Emissions (tons/yr)	Pollution Control Efficiency(%)	Maximum Controlled Emissions (tons/yr)
Fugitive Emissions (SMC-MFG1 and SMC-MFG3)						
Resin Storage Tanks						
VOC	3.10	0.059	0.18	0.801	0.00%	0.801
Styrene	3.10	0.059	0.18	0.801	0.00%	0.801
Mixing Station						
VOC	3.10	0.78	2.42	10.6	0.00%	10.6
Styrene	3.10	0.78	2.42	10.6	0.00%	10.6
SMC Machine						
VOC	3.10	0.30	0.93	4.07	0.00%	4.07
Styrene	3.10	0.30	0.93	4.07	0.00%	4.07
Compounding Area						
VOC	3.10	2.70	8.37	36.7	0.00%	36.7
Styrene	3.10	2.70	8.37	36.7	0.00%	36.7
SMC Holding Area						
VOC	3.10	0.0018	0.006	0.024	0.00%	0.024
Styrene	3.10	0.0018	0.006	0.024	0.00%	0.024
State Potential Emissions			Total VOC:	52.2		52.2
			Total Styrene	52.2		52.2

METHODOLOGY

Potential VOC Pounds per Hour = Pounds of material used for each part * Parts per hour * monomer content * flash off

Potential VOC Tons per Year = Potential VOC Pounds per hour * 8760 hrs/yr / 2000 lbs/ton

Particulate Potential Tons per Year = (units/hour) * (lbs/unit) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Styrene Potential Tons per Year = VOC tons per year * % VOC that is Styrene

Emission Factors are based on figure 3 page 8 of Q and A: Composites Manufacturing Emissions

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Meridian Automotive Systems, Inc.
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741-0189
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 29,1996

Material (As Applied)	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % MIBK	Weight % MEK	Weight % Ethylene	Weight % Ethylbenzene	Weight % Formaldehyde	Weight % Toluene	Weight % Cumene	Xylene Emissions (tons/yr)	MIBK Emissions (tons/yr)	MEK Emissions (tons/yr)	Ethylene Glycol Emissions (tons/yr)	Ethylbenzene Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	Toluene Emissions (tons/yr)	Cumene Emissions (tons/yr)
SB-A Paint (Prime Coatings)							Glycol												
Installed in 1993																			
8000 SW BC-17	10.08	5.00	1.00	2.88%	2.01%	6.90%	2.60%	0.00%	0.00%	0.00%	0.00%	6.36	4.44	15.23	5.74	0.00	0.00	0.0000	0.00
8015 SW G58AR1	9.16	5.00	1.00	1.64%	0.00%	14.79%	0.00%	0.00%	0.00%	0.00%	0.00%	3.29	0.00	29.67	0.00	0.00	0.00	6.5999	0.00
8023 Red Spot Ebony	8.41	5.00	1.00	24.80%	0.00%	0.00%	0.00%	8.27%	0.83%	8.27%	0.00%	45.68	0.00	0.00	0.00	15.23	1.53	15.2316	0.00
8025 Cooks Beige	10.27	5.00	1.00	20.83%	0.00%	6.57%	0.00%	3.71%	0.00%	0.00%	0.00%	46.85	0.00	14.78	0.00	8.34	0.00	0.0000	0.00
8050 SO Storm Gray	8.16	5.00	1.00	0.08%	0.00%	0.00%	0.00%	0.08%	0.00%	0.01%	0.00%	0.14	0.00	0.00	0.00	0.14	0.00	0.0179	0.00
8064 SW Med Mist	9.26	5.00	1.00	0.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.84%	0.31%	0.95	0.00	0.00	0.00	0.00	0.00	1.7035	0.63
8065 SW Camel Tan	9.46	5.00	1.00	0.46%	0.00%	0.00%	0.00%	0.00%	0.00%	0.85%	0.31%	0.95	0.00	0.00	0.00	0.00	0.00	1.7610	0.64
8066 Dark Slate	8.86	5.00	1.00	0.49%	0.00%	0.00%	0.00%	0.00%	0.00%	0.84%	0.33%	0.95	0.00	0.00	0.00	0.00	0.00	1.6299	0.64
8067 SW Med Fawn	10.06	5.00	1.00	0.43%	0.00%	0.00%	0.00%	0.00%	0.00%	0.86%	0.29%	0.95	0.00	0.00	0.00	0.00	0.00	1.8947	0.64
8116 SW AC-601	9.38	5.00	1.00	0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.85%	0.08%	0.25	0.00	0.00	0.00	0.00	0.00	1.7461	0.16
8118 Akzo 40431CN	9.17	5.00	1.00	0.00%	0.00%	0.98%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00	0.00	1.97	0.00	0.00	0.08	0.0000	0.00
8119 RS Graphite	8.17	5.00	1.00	24.66%	0.00%	0.00%	0.00%	4.11%	0.17%	8.22%	0.00%	44.12	0.00	0.00	0.00	7.35	0.30	14.7075	0.00
8120 SO BP-9471	9.13	5.00	1.00	0.71%	1.01%	8.88%	0.00%	0.35%	0.03%	0.01%	0.00%	1.42	2.02	17.76	0.00	0.70	0.06	0.0200	0.00
8159 Akzo 224C	10.02	5.00	1.00	2.90%	0.00%	0.00%	4.95%	0.00%	0.03%	0.00%	0.00%	6.36	0.00	0.00	10.86	0.00	0.07	0.0000	0.00
8616 SW Gray	11.20	5.00	1.00	2.36%	4.71%	0.00%	0.00%	0.00%	0.00%	4.64%	0.00%	5.79	11.55	0.00	0.00	0.00	0.00	11.3810	0.00
Individual HAP:												46.8	11.6	29.7	10.9	15.2	1.53	15.2	0.642

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Benzene	Weight % 2-(2-butoxyethoxy)	Weight % 2-Butoxyethanol	Weight % Diethylene glycol	Weight % Methyl Alcohol	Weight % Toluene-2,4-diisocyanate	Benzene Emissions (tons/yr)	2-(2-butoxyethoxy) Emissions (tons/yr)	2-Butoxyethanol Emissions (tons/yr)	Diethylene Glycol Emissions (tons/yr)	Methyl Alcohol Emissions (tons/yr)	Toluene 2-(diisocyanate) Emissions (tons/yr)
SB-A Paint (Prime Coatings)					Ethanol										
Installed in 1993															
8000 SW BC-17	10.08	5.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.00	0.00	0.00	0.00	0.00	0.11
8015 SW G58AR1	9.16	5.00	1.00	0.00%	0.00%	0.00%	17.84%	0.00%	0.00%	0.00	0.00	0.00	35.79	0.00	0.00
8023 Red Spot Ebony	8.41	5.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8025 Cooks Beige	10.27	5.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8050 SO Storm Gray	8.16	5.00	1.00	0.00%	5.79%	0.00%	0.00%	0.00%	0.00%	0.00	10.35	0.00	0.00	0.00	0.00
8064 SW Med Mist	9.26	5.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8065 SW Camel Tan	9.46	5.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8066 Dark Slate	8.86	5.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8067 SW Med Fawn	10.06	5.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8116 SW AC-601	9.38	5.00	1.00	0.00%	3.78%	0.00%	0.00%	0.00%	0.00%	0.00	7.76	0.00	0.00	0.00	0.00
8118 Akzo 40431CN	9.17	5.00	1.00	0.00%	0.00%	0.00%	2.95%	0.00%	0.00%	0.00	0.00	0.00	5.92	0.00	0.00
8119 RS Graphite	8.17	5.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8120 SO BP-9471	9.13	5.00	1.00	0.00%	0.00%	0.00%	7.16%	0.14%	0.00%	0.00	0.00	0.00	14.32	0.28	0.00
8159 Akzo 224C	10.02	5.00	1.00	0.00%	0.00%	1.71%	6.53%	0.00%	0.00%	0.00	0.00	3.75	14.33	0.00	0.00
8616 SW Gray	11.20	5.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00	0.00	0.00	0.00	0.00	0.07
Individual HAP:										0.00	10.3	3.75	35.8	0.280	0.110
TOTAL HAPs:										182					

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Material (As Applied)	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % MIBK	Weight % MEK	Weight % Ethylene	Weight % Ethylbenzene	Weight % Formaldehyde	Weight % Toluene	Weight % Cumene	Xylene Emissions (tons/yr)	MIBK Emissions (tons/yr)	MEK Emissions (tons/yr)	Ethylene Glycol Emissions (tons/yr)	Ethylbenzene Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	Toluene Emissions (tons/yr)	Cumene Emissions (tons/yr)
SB-B Paint (Prime Coatings)																			
Installed in 1993							Glycol												
8000 SW BC-17	10.08	10.00	1.00	2.88%	2.01%	6.90%	2.60%	0.00%	0.00%	0.00%	0.00%	12.72	8.87	30.46	11.48	0.00	0.00	0.0000	0.00
8015 SW G58AR1	9.16	10.00	1.00	1.64%	0.00%	14.79%	0.00%	0.00%	0.00%	3.29%	0.00%	6.58	0.00	59.34	0.00	0.00	0.00	13.1997	0.00
8023 Red Spot Ebony	8.41	10.00	1.00	24.80%	0.00%	0.00%	0.00%	0.83%	8.27%	0.00%	0.00%	91.35	0.00	0.00	0.00	30.46	3.06	30.4632	0.00
8025 Cooks Beige	10.27	10.00	1.00	20.83%	0.00%	6.57%	0.00%	3.71%	0.00%	0.00%	0.00%	93.70	0.00	29.55	0.00	16.69	0.00	0.0000	0.00
8050 SO Storm Gray	8.16	10.00	1.00	0.08%	0.00%	0.00%	0.00%	0.08%	0.00%	0.01%	0.00%	0.29	0.00	0.00	0.00	0.29	0.00	0.0357	0.00
8064 SW Med Mist	9.26	10.00	1.00	0.47%	0.00%	0.00%	0.00%	0.00%	0.00%	0.84%	0.31%	1.91	0.00	0.00	0.00	0.00	0.00	3.4069	1.26
8065 SW Camel Tan	9.46	10.00	1.00	0.46%	0.00%	0.00%	0.00%	0.00%	0.00%	0.85%	0.31%	1.91	0.00	0.00	0.00	0.00	0.00	3.5220	1.28
8066 Dark Slate	8.86	10.00	1.00	0.49%	0.00%	0.00%	0.00%	0.00%	0.00%	0.84%	0.33%	1.90	0.00	0.00	0.00	0.00	0.00	3.2598	1.28
8067 SW Med Fawn	10.06	10.00	1.00	0.43%	0.00%	0.00%	0.00%	0.00%	0.00%	0.86%	0.29%	1.89	0.00	0.00	0.00	0.00	0.00	3.7894	1.28
8116 SW AC-601	9.38	10.00	1.00	0.12%	0.00%	0.00%	0.00%	0.00%	0.00%	0.85%	0.08%	0.49	0.00	0.00	0.00	0.00	0.00	3.4922	0.33
8118 Akzo 40431CN	9.17	10.00	1.00	0.00%	0.00%	0.98%	0.00%	0.00%	0.04%	0.00%	0.00%	0.00	0.00	3.94	0.00	0.00	0.16	0.0000	0.00
8119 RS Graphite	8.17	10.00	1.00	24.66%	0.00%	0.00%	0.00%	4.11%	0.17%	8.22%	0.00%	88.24	0.00	0.00	0.00	14.71	0.61	29.4149	0.00
8120 SO BP-9471	9.13	10.00	1.00	0.71%	1.01%	8.88%	0.00%	0.35%	0.03%	0.01%	0.00%	2.84	4.04	35.51	0.00	1.40	0.12	0.0400	0.00
8159 Akzo 224C	10.02	10.00	1.00	2.90%	0.00%	0.00%	4.95%	0.00%	0.03%	0.00%	0.00%	12.73	0.00	0.00	21.72	0.00	0.13	0.0000	0.00
8616 SW Gray	11.20	10.00	1.00	2.36%	4.71%	0.00%	0.00%	0.00%	0.00%	4.64%	0.00%	11.58	23.11	0.00	0.00	0.00	0.00	22.7620	0.00
Individual HAP:												93.7	23.1	59.3	21.7	30.5	3.06	30.5	1.28

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Benzene	Weight % 2-(2-butoxyethoxy) Ethanol	Weight % 2-Butoxyethanol	Weight % Diethylene glycol	Weight % Methyl Alcohol	Weight % Toluene-2,4-diisocyanate	Benzene Emissions (tons/yr)	2-(2-butoxyethoxy) Emissions (tons/yr)	2-Butoxyethanol Emissions (tons/yr)	Diethylene Glycol Emissions (tons/yr)	Methyl Alcohol Emissions (tons/yr)	Toluene 2,4-diisocyanate Emissions (tons/yr)
SB-B Paint (Prime Coatings)															
Installed in 1980															
8000 SW BC-17	10.08	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.00	0.00	0.00	0.00	0.00	0.22
8015 SW G58AR1	9.16	10.00	1.00	0.00%	0.00%	0.00%	17.84%	0.00%	0.00%	0.00	0.00	0.00	71.58	0.00	0.00
8023 Red Spot Ebony	8.41	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8025 Cooks Beige	10.27	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8050 SO Storm Gray	8.16	10.00	1.00	0.00%	5.79%	0.00%	0.00%	0.00%	0.00%	0.00	20.69	0.00	0.00	0.00	0.00
8064 SW Med Mist	9.26	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8065 SW Camel Tan	9.46	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8066 Dark Slate	8.86	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8067 SW Med Fawn	10.06	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8116 SW AC-601	9.38	10.00	1.00	0.00%	3.78%	0.00%	0.00%	0.00%	0.00%	0.00	15.53	0.00	0.00	0.00	0.00
8118 Akzo 40431CN	9.17	10.00	1.00	0.00%	0.00%	0.00%	2.95%	0.00%	0.00%	0.00	0.00	0.00	11.85	0.00	0.00
8119 RS Graphite	8.17	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
8120 SO BP-9471	9.13	10.00	1.00	0.00%	0.00%	0.00%	7.16%	0.14%	0.00%	0.00	0.00	0.00	28.63	0.56	0.00
8159 Akzo 224C	10.02	10.00	1.00	0.00%	0.00%	1.71%	6.53%	0.00%	0.00%	0.00	0.00	7.50	28.66	0.00	0.00
8616 SW Gray	11.20	10.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%	0.00	0.00	0.00	0.00	0.00	0.15
Individual HAP:											0.00	20.7	7.50	71.6	0.560
TOTAL HAPs:											364				0.221

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % MIBK	Weight % MEK	Weight % Ethylene	Weight % Ethyl	Xylene Emissions (tons/yr)	MIBK Emissions (tons/yr)	MEK Emissions (tons/yr)	Ethylene Glycol Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)
SB-C24 Paint (Prime Coatings)							Glycol	Benzene					
Installed in 1982													
8062 Deep Amethyst	8.00	3.00	1.00	4.16%	4.16%	21.04%	0.00%	0.83%	4.37	4.37	22.12	0.00	0.87
8073 Deep Slate	7.90	3.00	1.00	0.00%	3.95%	3.95%	0.00%	0.00%	0.00	4.10	4.10	0.00	0.00
8076 Strawberry	8.34	3.00	1.00	0.00%	4.13%	0.00%	0.00%	0.00%	0.00	4.53	0.00	0.00	0.00
8078 Poppy Red	7.98	3.00	1.00	15.83%	4.09%	0.00%	0.00%	2.87%	16.60	4.29	0.00	0.00	3.01
8079 Candy Apple	8.25	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
8097 Clear	8.25	3.00	1.00	16.30%	0.00%	0.00%	0.00%	4.08%	17.67	0.00	0.00	0.00	4.42
8107 Shale Green	8.01	3.00	1.00	4.07%	4.07%	0.00%	0.00%	0.81%	4.28	4.28	0.00	0.00	0.85
8109 Deep Hunter Green	8.06	3.00	1.00	4.08%	4.08%	0.00%	0.00%	0.82%	4.32	4.32	0.00	0.00	0.87
8112 Bright Silver Met	8.11	3.00	1.00	4.08%	0.00%	0.00%	0.00%	0.82%	4.35	0.00	0.00	0.00	0.87
8113 Patriot Blue PC	8.01	3.00	1.00	0.00%	1.62%	0.00%	0.00%	0.00%	0.00	1.71	0.00	0.00	0.00
8114 Aquamarine Met	7.95	3.00	1.00	4.06%	4.06%	0.00%	0.00%	0.81%	4.24	4.24	0.00	0.00	0.85
8117 Inferno Red PC	8.15	3.00	1.00	4.09%	0.00%	0.00%	0.00%	0.82%	4.38	0.00	0.00	0.00	0.88
8172 Ice Silver	8.25	3.00	1.00	4.02%	4.02%	4.02%	0.00%	0.80%	4.36	4.36	4.36	0.00	0.87
8174 Bright White	9.72	3.00	1.00	4.31%	0.00%	18.20%	0.00%	0.86%	5.50	0.00	23.25	0.00	1.10
8175 Radiant Fire Red	8.01	3.00	1.00	4.16%	0.00%	16.87%	0.00%	0.83%	4.38	0.00	17.76	0.00	0.87
8176 Primal Red	8.21	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.82%	0.00	0.00	0.00	0.00	0.88
8178 Cocoon White	8.71	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
8181 Black	8.10	3.00	1.00	19.66%	0.00%	0.00%	0.00%	3.64%	20.92	0.00	0.00	0.00	3.87
8184 Island Teal	8.20	3.00	1.00	4.09%	4.09%	0.00%	0.00%	0.82%	4.41	4.41	0.00	0.00	0.88
8186 Golden White	8.02	3.00	1.00	4.09%	4.09%	0.00%	4.09%	0.82%	4.31	0.00	0.00	4.31	0.86
8188 Champagne	8.62	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.81%	0.00	0.00	0.00	0.00	0.92
8189 Cranberry	8.19	3.00	1.00	4.09%	4.09%	0.00%	0.00%	0.82%	4.40	4.40	0.00	0.00	0.88
8191 Slate Blue	8.17	3.00	1.00	4.06%	0.00%	0.00%	0.00%	0.81%	4.36	0.00	0.00	0.00	0.87
8192 Modern Blue	8.02	3.00	1.00	4.07%	0.00%	0.00%	0.00%	0.81%	4.29	0.00	0.00	0.00	0.85
8194 Dark Green	7.94	3.00	1.00	4.08%	0.00%	0.00%	0.00%	0.82%	4.26	0.00	0.00	0.00	0.86
Individual HAP:									20.9	4.53	23.2	4.31	4.42

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Methyl Alcohol	Weight % Formaldehyde	Weight % 2-Butoxyethanol	Weight % Toluene	Methyl Alcohol Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	2-Butoxyethanol Emissions (tons/yr)	Toluene Emissions (tons/yr)
SB-C24 Paint (Prime Coatings)							Glycol				
Installed in 1982											
8062 Deep Amethyst	8.00	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8073 Deep Slate	7.90	3.00	1.00	0.00%	0.00%	0.00%	4.10%	0.00	0.00	0.00	4.26
8076 Strawberry	8.34	3.00	1.00	0.00%	0.00%	0.00%	4.13%	0.00	0.00	0.00	4.53
8078 Poppy Red	7.98	3.00	1.00	0.00%	0.00%	0.00%	8.18%	0.00	0.00	0.00	8.58
8079 Candy Apple	8.25	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8097 Clear	8.25	3.00	1.00	0.00%	0.82%	1.13%	0.00%	0.00	0.89	1.22	0.00
8107 Shale Green	8.01	3.00	1.00	0.00%	0.00%	0.00%	4.07%	0.00	0.00	0.00	4.28
8109 Deep Hunter Green	8.06	3.00	1.00	0.00%	0.82%	0.00%	4.08%	0.00	0.87	0.00	4.32
8112 Bright Silver Met	8.11	3.00	1.00	0.00%	0.00%	0.00%	4.08%	0.00	0.00	0.00	4.35
8113 Patriot Blue PC	8.01	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8114 Aquamarine Met	7.95	3.00	1.00	0.00%	0.00%	0.00%	4.06%	0.00	0.00	0.00	4.24
8117 Inferno Red PC	8.15	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8172 Ice Silver	8.25	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8174 Bright White	9.72	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8175 Radiant Fire Red	8.01	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8176 Primal Red	8.21	3.00	1.00	4.09%	0.00%	0.00%	0.00%	4.41	0.00	0.00	0.00
8178 Cocoon White	8.71	3.00	1.00	4.07%	0.00%	0.00%	0.07%	4.66	0.00	0.00	0.08
8181 Black	8.10	3.00	1.00	4.09%	0.82%	0.00%	0.00%	4.35	0.87	0.00	0.00
8184 Island Teal	8.20	3.00	1.00	0.00%	0.00%	0.00%	4.09%	0.00	0.00	0.00	4.41
8186 Golden White	8.02	3.00	1.00	0.00%	0.00%	0.00%	4.09%	0.00	0.00	0.00	4.31
8188 Champagne	8.62	3.00	1.00	0.00%	0.00%	0.00%	4.06%	0.00	0.00	0.00	4.60
8189 Cranberry	8.19	3.00	1.00	0.00%	0.00%	0.00%	4.09%	0.00	0.00	0.00	4.40
8191 Slate Blue	8.17	3.00	1.00	0.00%	0.00%	0.00%	4.06%	0.00	0.00	0.00	4.36
8192 Modern Blue	8.02	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8194 Dark Green	7.94	3.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Individual HAP:								4.66	0.89	1.22	8.58
Total HAPs:								72.8			

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % MIBK	Weight % MEK	Weight % Ethylene	Weight % Ethyl	Xylene Emissions (tons/yr)	MIBK Emissions (tons/yr)	MEK Emissions (tons/yr)	Ethylene Glycol Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)
SB-C32 Paint (Prime Coatings)							Glycol	Benzene					
Installed in 1982													
8062 Deep Amethyst	8.00	4.00	1.00	4.16%	4.16%	21.04%	0.00%	0.83%	5.83	5.83	29.49	0.00	1.16
8073 Deep Slate	7.90	4.00	1.00	0.00%	3.95%	3.95%	0.00%	0.00%	0.00	5.47	5.47	0.00	0.00
8076 Strawberry	8.34	4.00	1.00	0.00%	4.13%	0.00%	0.00%	0.00%	0.00	6.03	0.00	0.00	0.00
8078 Poppy Red	7.98	4.00	1.00	15.83%	4.09%	0.00%	0.00%	2.87%	22.13	5.72	0.00	0.00	4.01
8079 Candy Apple	8.25	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
8097 Clear	8.25	4.00	1.00	16.30%	0.00%	0.00%	0.00%	4.08%	23.56	0.00	0.00	0.00	5.90
8107 Shale Green	8.01	4.00	1.00	4.07%	4.07%	0.00%	0.00%	0.81%	5.71	5.71	0.00	0.00	1.14
8109 Deep Hunter Green	8.06	4.00	1.00	4.08%	4.08%	0.00%	0.00%	0.82%	5.76	5.76	0.00	0.00	1.16
8112 Bright Silver Met	8.11	4.00	1.00	4.08%	0.00%	0.00%	0.00%	0.82%	5.80	0.00	0.00	0.00	1.17
8113 Patriot Blue PC	8.01	4.00	1.00	0.00%	1.62%	0.00%	0.00%	0.00%	0.00	2.27	0.00	0.00	0.00
8114 Aquamarine Met	7.95	4.00	1.00	4.06%	4.06%	0.00%	0.00%	0.81%	5.65	5.65	0.00	0.00	1.13
8117 Inferno Red PC	8.15	4.00	1.00	4.09%	0.00%	0.00%	0.00%	0.82%	5.84	0.00	0.00	0.00	1.17
8172 Ice Silver	8.25	4.00	1.00	4.02%	4.02%	4.02%	0.00%	0.80%	5.81	5.81	5.81	0.00	1.16
8174 Bright White	9.72	4.00	1.00	4.31%	0.00%	18.20%	0.00%	0.86%	7.34	0.00	30.99	0.00	1.46
8175 Radiant Fire Red	8.01	4.00	1.00	4.16%	0.00%	16.87%	0.00%	0.83%	5.84	0.00	23.67	0.00	1.16
8176 Primal Red	8.21	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.82%	0.00	0.00	0.00	0.00	1.18
8178 Cocoon White	8.71	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00
8181 Black	8.10	4.00	1.00	19.66%	0.00%	0.00%	0.00%	3.64%	27.90	0.00	0.00	0.00	5.17
8184 Island Teal	8.20	4.00	1.00	4.09%	4.09%	0.00%	0.00%	0.82%	5.88	5.88	0.00	0.00	1.18
8186 Golden White	8.02	4.00	1.00	4.09%	4.09%	0.00%	4.09%	0.82%	5.75	5.75	0.00	5.75	1.15
8188 Champagne	8.62	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.81%	0.00	0.00	0.00	0.00	1.22
8189 Cranberry	8.19	4.00	1.00	4.09%	4.09%	4.09%	0.00%	0.82%	5.87	5.87	5.87	0.00	1.18
8191 Slate Blue	8.17	4.00	1.00	4.06%	0.00%	0.00%	0.00%	0.81%	5.81	0.00	0.00	0.00	1.16
8192 Modern Blue	8.02	4.00	1.00	4.07%	0.00%	0.00%	0.00%	0.81%	5.72	0.00	0.00	0.00	1.14
8194 Dark Green	7.94	4.00	1.00	4.08%	0.00%	0.00%	0.00%	0.82%	5.68	0.00	0.00	0.00	1.14
Individual HAP:									27.9	6.03	31.0	5.75	5.90

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Methyl Alcohol	Weight % Formaldehyde	Weight % 2-Butoxyethanol	Weight % Toluene	Methyl Alcohol Emissions (tons/yr)	Formaldehyde Emissions (tons/yr)	2-Butoxyethanol Emissions (tons/yr)	Toluene Emissions (tons/yr)
SB-C32 Paint (Prime Coatings)							Glycol				
Installed in 1982											
8062 Deep Amethyst	8.00	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8073 Deep Slate	7.90	4.00	1.00	0.00%	0.00%	0.00%	4.10%	0.00	0.00	0.00	5.67
8076 Strawberry	8.34	4.00	1.00	0.00%	0.00%	0.00%	4.13%	0.00	0.00	0.00	6.03
8078 Poppy Red	7.98	4.00	1.00	0.00%	0.00%	0.00%	8.18%	0.00	0.00	0.00	11.44
8079 Candy Apple	8.25	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8097 Clear	8.25	4.00	1.00	0.00%	0.82%	1.13%	0.00%	0.00	1.19	1.63	0.00
8107 Shale Green	8.01	4.00	1.00	0.00%	0.00%	0.00%	4.07%	0.00	0.00	0.00	5.71
8109 Deep Hunter Green	8.06	4.00	1.00	0.00%	0.82%	0.00%	4.08%	0.00	1.16	0.00	5.76
8112 Bright Silver Met	8.11	4.00	1.00	0.00%	0.00%	0.00%	4.08%	0.00	0.00	0.00	5.80
8113 Patriot Blue PC	8.01	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8114 Aquamarine Met	7.95	4.00	1.00	0.00%	0.00%	0.00%	4.06%	0.00	0.00	0.00	5.65
8117 Inferno Red PC	8.15	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8172 Ice Silver	8.25	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8174 Bright White	9.72	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8175 Radiant Fire Red	8.01	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8176 Primal Red	8.21	4.00	1.00	4.09%	0.00%	0.00%	0.00%	5.88	0.00	0.00	0.00
8178 Cocoon White	8.71	4.00	1.00	4.07%	0.00%	0.00%	0.07%	6.21	0.00	0.00	0.11
8181 Black	8.10	4.00	1.00	4.09%	0.82%	0.00%	0.00%	5.80	1.16	0.00	0.00
8184 Island Teal	8.20	4.00	1.00	0.00%	0.00%	0.00%	4.09%	0.00	0.00	0.00	5.88
8186 Golden White	8.02	4.00	1.00	0.00%	0.00%	0.00%	4.09%	0.00	0.00	0.00	5.75
8188 Champagne	8.62	4.00	1.00	0.00%	0.00%	0.00%	4.06%	0.00	0.00	0.00	6.13
8189 Cranberry	8.19	4.00	1.00	0.00%	0.00%	0.00%	4.09%	0.00	0.00	0.00	5.87
8191 Slate Blue	8.17	4.00	1.00	0.00%	0.00%	0.00%	4.06%	0.00	0.00	0.00	5.81
8192 Modern Blue	8.02	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
8194 Dark Green	7.94	4.00	1.00	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
Individual HAP:								6.21	1.19	1.63	11.4
Total HAP:								97.0			

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Material	Density (lbs/gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % MIBK	Weight % MEK	Weight % Ethylene Glycol	Weight % Ethyl Benzene	Weight % Toluene-2,4-diisocyanate	Weight % Toluene	Xylene Emissions (tons/yr)	MIBK Emissions (tons/yr)	MEK Emissions (tons/yr)	Ethylene Glycol Emissions (tons/yr)	Ethyl Benzene Emissions (tons/yr)	Toluene-2,4-diisocyanate Emissions (tons/yr)	Toluene Emissions (tons/yr)
TU-A																	
Installed prior to 1980																	
8001 Cooks Air Dry	10.19	0.25	1.00	14.80%	0.00%	0.00%	0.00%	2.61%	0.00%	0.00%	1.65	0.00	0.00	0.00	0.29	0.00	0.00
8002 BC-17 Air Dry	10.09	0.25	1.00	2.88%	0.00%	2.16%	0.00%	0.00%	0.05%	2.39%	0.32	0.00	0.24	0.00	0.00	0.006	0.26
8004 AC-17 Air Dry	10.06	0.25	1.00	1.52%	6.08%	4.56%	2.28%	0.00%	0.03%	4.06%	0.17	0.67	0.50	0.25	0.00	0.00	0.45
8005 Grayfill	17.16	0.25	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.004	0.00
Individual Total											1.65	0.670	0.502	0.251	0.291	0.006	0.447
TU-B																	
Installed prior to 1980																	
8001 Cooks Air Dry	10.19	0.25	1.00	14.80%	0.00%	0.00%	0.00%	2.61%	0.00%	0.00%	1.65	0.00	0.00	0.00	0.29	0.00	0.00
8002 BC-17 Air Dry	10.09	0.25	1.00	2.88%	0.00%	2.16%	0.00%	0.00%	0.05%	2.39%	0.32	0.00	0.24	0.00	0.00	0.006	0.26
8004 AC-17 Air Dry	10.06	0.25	1.00	1.52%	6.08%	4.56%	2.28%	0.00%	0.03%	4.06%	0.17	0.67	0.50	0.25	0.00	0.00	0.45
8005 Grayfill	17.16	0.25	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.004	0.00
Individual Total											1.65	0.670	0.502	0.251	0.291	0.006	0.447
TU-FNSH																	
Installed prior to 1980																	
8003 Perky Pink	11.83	1.00	1.00	13.93%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	7.22	0.00	0.00	0.00	0.00	0.00	0.00
Individual Total											7.22	0.0	0.0	0.0	0.0	0.0	0.0
Overall Total											7.22	0.0	0.0	0.0	0.0	0.0	0.0

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lbs/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emission Calculations
Incinerator**

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Company Name: Meridian Automotive Systems
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

Hook Oven PO-BH

THROUGHPUT
lbs/hr
10

THROUGHPUT
tons/yr
43.8

Emission Factor in lb/ton	POLLUTANT				
	PM	SO2	CO	VOC	NOX
	7.0	2.5	10.0	3.0	3.0
Potential Emissions in ton/yr	0.153	0.055	0.219	0.066	0.066

Methodology

Emission factors are from AP 42 (5th Edition 1/95) Table 2.1-12, Uncontrolled emission factors for industrial/commercial refuse combustors, multiple chambers

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Insignificant Activities****Company Name: Meridian Automotive Systems****Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741****Part 70: T 003-5942****Plt ID: 003-00059****Reviewer: Craig J. Friederich****Date: May 26, 1996**Heat Input Capacity
MMBtu/hrPotential Throughput
MMCF/yr

69.94

612.68

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
Potential Emission in tons/yr	0.582	2.33	0.184	**see below	1.68	25.7

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 22 for HAPs emissions calculations.

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****Insignificant Activities****HAPs Emissions****Company Name: Meridian Automotive Systems****Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741****Part 70: T 003-5942****Plt ID: 003-00059****Reviewer: Craig J. Friederich****Date: May 26, 1996****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	6.433E-04	3.676E-04	2.298E-02	5.514E-01	1.042E-03

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPS
Potential Emission in tons/yr	1.532E-04	3.370E-04	4.289E-04	1.164E-04	6.433E-04	0.578

Methodology is the same as page 21.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emissions Calculations
PM Potential Emissions

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Company Name: Meridian Automotive Systems
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

Material	Emission Rate (lb/hr)	Emission Rate (tons/yr)
Material Handling and Mixing		
SMC-1, SMC-3	0.695	3.04
Uncontrolled Total:	0.695	3.04
Control Efficiency:	98.5%	
Controlled Total:	0.010	0.046

METHODOLOGY

Uncontrolled Particulate Emissions (total)= Amount Collected in Baghouse/Baghouse Control Efficiency

Maximum Uncontrolled Emissions (tpy)=Emission Rate (lb/hr) x 8760/2000

Maximum Controlled Emissions (tpy) = Maximum Uncontrolled Emissions (tpy) x (1-pollution control efficiency)

**Appendix A: Emissions Calculations
VOC, HAP and Particulate
From Closed Molding Operations**

**Company Name: Meridian Automotive Systems
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Plt ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996**

Material	Weight % Monomer	Usage (lbs/hour)	Flash Off (%)	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	%VOC that is Styrene	Potential Styrene Emissions (tons/yr)	Particulate Potential (tons/yr)	Transfer Efficiency
Compression Molding Presses(SMC)										
PR-0206 (installed in 1975)	25.00%	141	3.0%	1.06	25.38	4.63	100%	4.63	0.00	100%
PR-0213 (Installed in 1976)	25.00%	141	3.0%	1.06	25.38	4.63	100%	4.63	0.00	100%
PR-0419 (Installed in 1986)	25.00%	219	3.0%	1.64	39.42	7.19	100%	7.19	0.00	100%
PR-0420 (Installed in 1986)	25.00%	219	3.0%	1.64	39.42	7.19	100%	7.19	0.00	100%
PR-0617 (Installed in 1968)	25.00%	219	3.0%	1.64	39.42	7.19	100%	7.19	0.00	100%
PR-0618 (Installed in 1986)	25.00%	219	3.0%	1.64	39.42	7.19	100%	7.19	0.00	100%
PRV-0648 (Installed in 1990)	25.00%	219	3.0%	1.64	39.42	7.19	100%	7.19	0.00	100%
PRV-0849 (Installed in 1990)	25.00%	188	3.0%	1.41	33.84	6.18	100%	6.18	0.00	100%
PRV-1026 (Installed in 1990)	25.00%	275	3.0%	2.06	49.50	9.03	100%	9.03	0.00	100%
PRV-1222 (Installed in 1973)	25.00%	338	3.0%	2.54	60.84	11.10	100%	11.1	0.00	100%
PRV-1223 (Installed in 1973)	25.00%	338	3.0%	2.54	60.84	11.10	100%	11.1	0.00	100%
PR-1250 (Installed in 1985)	25.00%	338	3.0%	2.54	60.84	11.10	100%	11.1	0.00	100%
PRV-1558 (Installed in 1977)	25.00%	263	3.0%	1.97	47.34	8.64	100%	8.64	0.00	100%
PRV-2024 (Installed in 1975)	25.00%	263	3.0%	1.97	47.34	8.64	100%	8.64	0.00	100%
PRV-2025 (Installed in 1975)	25.00%	263	3.0%	1.97	47.34	8.64	100%	8.64	0.00	100%
PRV-2059 (Installed in 1984)	25.00%	263	3.0%	1.97	47.34	8.64	100%	8.64	0.00	100%
PR-2566 (Installed in 2000)	25.00%	435	3.0%	3.26	78.30	14.29	100%	14.3	0.00	100%
PR-2567 (Installed in 2000)	25.00%	435	3.0%	3.26	78.30	14.29	100%	14.3	0.00	100%
PRV-4470 (Installed in 1995)	25.00%	263	3.0%	1.97	47.34	8.64	100%	8.64	0.00	100%
Injection Molding Press(SMC)										
PR-1571 (Installed in 1998)	13.00%	188	3.0%	0.73	17.60	3.21	100%	3.21	0.00	100%
Gel Coat Application										
Styrene	17.00%	50	3.0%	0.26	6.12	1.12	100%	1.12	0.00	100%
VOC	29.00%	50	3.0%	0.44	10.44	1.91	100%	1.91	0.00	100%
State Potential Emissions				Uncontrolled VOC: 38.53	924.62	172		172	0	

METHODOLOGY

Potential VOC Pounds per Hour = Pounds of material used for each part * Parts per hour * monomer content * flash off

Potential VOC Tons per Year = Potential VOC Pounds per hour * 8760 hrs/yr / 2000 lbs/ton

Particulate Potential Tons per Year = (units/hour) * (lbs/unit) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Styrene Potential Tons per Year = VOC tons per year * % VOC that is Styrene

Flash off factors are based on AP-42 Table 4.4-2 for closed molding operations

Company Name: Meridian Automotive Systems
Address City IN Zip: 1890 Riverfork Drive West, Huntington, Indiana 46750
Part 70: T 069-5943
Pit ID: 069-00043
Reviewer: Craig J. Friederich
Date: May 29, 1996

Summary of Emissions

Uncontrolled Potential Emissions

Emission Unit	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	HAPS (tons/yr)
Booths	295	295	0.00	0.00	533	0.00	716
Three (3) Touch Up Booths	47.3	47.3	0.00	0.00	32.5	0.00	14.9
One (1) Boiler(BLR-B)	0.526	0.526	18.70	7.64	0.202	3.09	0.069
One (1) Boiler(BLR-A)	1.04	1.04	37.1	15.2	0.402	6.14	0.138
Two (2) Polyester Products Raw Materials Compounding Lines (SMC-MFG1, SMC-MFG3)	3.04	3.04	0	0	52.2	0	52.2
Two (2) Reinforced Plastic Molding Presses (2566,2567)	0	0	0	0	28.6	0	28.6
Eighteen (18) Reinforced Plastic Molding Presses	0.00	0.00	0.00	0.00	140	0.00	140
Insignificant Activities	32.5	24.2	1.81	68.9	3.23	32.6	1.60
Total	379	371	57.6	91.7	790	41.8	953

Controlled Emissions (Including All Limits)

Emission Unit	PM (tons/yr)	PM-10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	HAPS (tons/yr)
Booths	4.43	4.43	0.000	0.000	Less than 246.17 tons per year	0.000	Less than 246.1 2566, 2567 have less than 10 tpy individual HAP limit
Three (3) Touch Up Booths	0.710	0.710	0.000	0.000		0.000	
Two (2) Polyester Products Raw Materials Compounding Lines (SMC-MFG1, SMC-MFG3)	3.04	3.04	0.000	0.000		0.000	
Two (2) Reinforced Plastic Molding Presses (2566,2567)	0.000	0.000	0.000	0.000		0.000	
Eighteen (18) Reinforced Plastic Molding Presses	0.000	0.000	0.000	0.000		0.000	
One (1) Boiler(BLR-B)	0.526	0.526	18.70	7.64	0.202	3.09	0.069
One (1) Boiler (BLRA)	1.04	1.04	37.1	15.2	0.402	6.14	0.138
Insignificant Activities	32.5	24.2	1.81	68.9	3.23	32.6	1.60
Total	42.2	33.9	57.6	91.7	Less than 250	41.8	Less than 247.9

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Page 26 of 26 TSD App A

Company Name: Meridian Automotive Systems
Address City IN Zip: 14123 Roth Road, Grabill, Indiana 46741
Part 70: T 003-5942
Pit ID: 003-00059
Reviewer: Craig J. Friederich
Date: May 26, 1996

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
TU-SPLASH																
BC-17 Air dry	10.90	41.00%	0.0%	41.0%	0.0%	0.00%	0.00500	28.000	4.47	4.47	0.63	15.02	2.74	2.96	n/a	25%
Perky Pink	12.50	44.00%	0.0%	44.0%	0.0%	0.00%	0.00500	28.000	5.50	5.50	0.77	18.48	3.37	3.22	n/a	25%
Polane Reducer	7.25	100.00%	0.0%	100.0%	0.0%	0.00%	0.00100	28.000	7.25	7.25	0.20	4.87	0.89	0.00	n/a	25%
IBA	7.28	100.00%	0.0%	100.0%	0.0%	0.00%	0.00100	28.000	7.28	7.28	0.20	4.89	0.89	0.00	n/a	25%

State Potential Emissions

Add worst case coating to all solvents

PM Control Efficiency
Uncontrolled
Controlled

90.00%
1.80
1.80

43.26
43.26

7.89
7.89

6.18
0.62

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used